# Public Health Reports

Vol. 62 • MAY 23, 1947 • No. 21

Printed With the Approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing

# VOLUNTARY HEALTH INSURANCE IN WESTERN EUROPE ITS ORIGINS AND PLACE IN NATIONAL PROGRAMS 1

By George St. J. Perrott, Chief, Division of Public Health Methods, United States Public Health Service, and Joseph W. Mountin, Medical Director, United States Public Health Service.

A previous article <sup>2</sup> has shown the wartime and postwar developments in the health security programs of England, France, Belgium, Sweden, Denmark, and the Netherlands. The present paper traces for the same countries the origins and historical development of the voluntary health insurance systems from which the present programs have evolved. A description of this evolutionary process in Western Europe should be particularly timely because of the widespread interest in the voluntary health insurance movement throughout the United States.

In all six countries, voluntary health insurance originated with the medieval guilds. As these guilds passed out of existence, members of the community formed other self-governing societies to provide sickness benefits as well as other types of mutual assistance. By the end of the eighteenth century in England, and during the nineteenth century in the five other countries, steps were taken through Government to encourage the development of these societies by offering them legal status and exemption from certain types of taxes if they accepted an elementary form of public supervision to assure protection of the members' interests.

The form of public supervision, and the extent to which it included actuarial and other types of fiscal control, varied widely among countries. England, for example, enacted a law in 1819, which required friendly societies (a form of mutual benefit association) to

<sup>&</sup>lt;sup>1</sup> From the Divisions of Public Health Methods and States Relations.

The authors gratefully acknowledge the services of E. B. Kovar, Martha D. Ring, and Arthur Weissman in selecting, summarizing, and collating data.

<sup>&</sup>lt;sup>2</sup> See Health Insurance Programs and Plans of Western Europe; A Summary of Observations. Pub. Health Rep., 62:369-399 (Mar. 14, 1947).

submit their tables of contributions and benefits to the authorities for actuarial approval. This requirement was withdrawn in 1829, but actuarial certification was required under subsequent laws. The laws of Sweden (1891), Denmark (1892), Belgium (1894), and France (1898) required "approved" societies to show that their income was sufficient to meet their obligations. During this period the Netherlands instituted no specific financial controls for sickness benefit societies.

The successive stages of further legislative action were designed to increase coverage and the value and scope of benefits, distribute risks, and assure financial solvency.

The timing of contribution from national revenues toward voluntary health insurance also differed among countries. The first laws providing for this financial aid to mutual benefit societies were enacted in 1852 in France; in 1891 in Sweden; in 1892 in Denmark; and in 1898 in Belgium. No such aid to voluntary health insurance organizations was provided in the Netherlands or England. When compulsory health insurance was established in England under the law of 1911, however, provision was made for Government grants to that system, with approved societies participating only in the administration of cash sickness benefits.

In Denmark the conditions for receipt of public subsidies by "approved" societies included election of governing bodies by the members and fiscal controls. Furthermore, approval was accorded only to societies which (1) had more than a specified number of members; (2) admitted anyone in the area to membership if he met certain general requirements; and (3) guaranteed sickness benefits within certain maximum and minimum limits of amount and duration. Specifications of other countries included some but not all of these requirements at various stages of the development of national health insurance.

From the 1890's to the early 1940's, developments in voluntary health insurance were, as a whole, marked by (1) greatly increased membership, (2) amalgamation and federation of benefit societies to form large units which covered wide geographic areas and provided broader distribution of risks, (3) wider scope of medical benefits, (4) increased public supervision and control, (5) an increase in the volume of significant information on the incidence and duration of illness made available for actuarial purposes, and (6) in England and the Netherlands, the emergence and expansion of special voluntary insurance plans for physicians' services, hospitalization, and home nursing. During this period, however, Denmark was the only country in which health insurance provided medical and hospital benefits to nearly all persons in the population. By 1947, the other

five countries had enacted legislation establishing broad integrated programs of social security. In the field of medical care these programs provide much wider coverage, higher cash sickness benefits, and more comprehensive medical services than in former years.<sup>3</sup>

Denmark administers health insurance through approved mutual benefit societies, as during earlier years. Under their new laws, Sweden and Belgium retain similar societies to administer their Nationwide compulsory health insurance system. In its compulsory program, the Netherlands retains separate agencies for cash sickness and medical benefits, with the latter still administered by approved societies. France has created provincial and regional quasi-governmental agencies under the laws of 1945 to administer health insurance and other benefits within designated geographic areas; provisions for the election of the governing bodies of these agencies assure representation of insured persons.

England's approved societies will no longer participate in the national program; their functions in that program, i. e., the administration of cash sickness benefits, are to be transferred to regional and local offices of the Ministry of National Insurance. There is no provision for medical benefits under the insurance system; a National Health Service, to be established in 1948 under the Ministry of Health, will provide comprehensive medical service for the entire population. Provision for regional and local advisory or executive committees and councils representing varied interests will serve to decentralize the administration of the health service.

The following sections, which outline the origin and development of voluntary health insurance in the individual countries, also give some indication of the remaining role of such insurance in meeting national health needs.

# · ENGLAND AND WALES

Early History.—In England, the association of persons to provide mutual assistance during personal and family emergencies has been traced to seventh century religious and social guilds. These organizations and the craft guilds of the Middle Ages are said to be the forerunners of the present-day Friendly Societies which were formed during the seventeenth century on a fraternal, craft, or religious basis.

The industrial revolution, with its attendant shift of rural populations to urban centers, gave impetus to the friendly society movement. By the latter part of the eighteenth century these organizations were sufficiently numerous and important to merit legislative recognition, protection, and control. The Friendly Societies Act of 1793 gave encouragement to, and instituted elementary controls over, "societies for raising, by voluntary subscription of the members, separate funds

<sup>3</sup> See reference cited in footnote 2 for the provisions of these new programs.

for their mutual relief and maintenance in sickness, old age, and infirmity."

19th Century Developments.—In the nineteenth century, as the friendly societies increased in number and membership, additional legislative regulations were imposed, including requirements of formal registration and actuarial certification. Other developments in voluntary health insurance during this period include (a) establishment of actuarial bases for the administration of insurance funds, (b) increased public regulation of the societies, (c) federation of many small fraternal societies into several large organizations, and (d) growth and development of a variety of plans for providing sickness benefits and other assistance to members and their dependents. Financial aid and medical treatment were furnished by trade union benefit funds, church funds, medical aid societies, shop clubs, and other organizations, and also through work contract arrangements in collieries and industrial plants.

Only a fraction of the population was covered by these organizations, however, and most of the coverage was among skilled urban workers. The benefits were limited both in type and duration. In many instances when medical services were made available through contract arrangements between the societies and physicians, these arrangements proved unsatisfactory. The medical profession was dissatisfied because of the lack of medical control over the treatment furnished, inadequate remuneration for services provided, and the generally poor working conditions of the contract doctors. Although financial administration had been greatly improved by the use of morbidity and mortality data for actuarial purposes, a large proportion of the small societies were unable to meet their liabilities.

National Health Insurance Act of 1911.—Compulsory health insurance began in Great Britain on July 15, 1912. The National Insurance Act of 1911, the authority under which the new system was established, provided small cash benefits during sickness, disablement, and maternity, and medical benefits consisting largely of general practitioner's services (including medicines). Coverage was restricted to employed persons aged 16-70. Dependents of insured persons were not covered, and persons employed in nonmanual labor were excluded if their annual pay exceeded £160. This income limit was increased to £250 in 1920 and to £420 in 1942. Ordinary cash sickness benefits paid under compulsory health insurance originally were 10 shillings or less a week, depending on sex and marital status. In 1920, these weekly rates were increased to 15s. for men and 12s. for women. As of January 1942, the benefits were raised again, this time to 18s. for men, 15s. for unmarried women, and 13s. for married women. Under the act of 1911, the qualifying period for cash sickness

benefits was set at 26 weeks of contribution. Beginning with 1918, persons having at least 26 but less than 104 weekly contributions to their credit received reduced payments. Cash sickness benefits were limited in duration to 26 weeks, after which reduced amounts were payable as disablement benefits.

A limited number of persons were permitted to become voluntarily insured under the national health insurance system. This provision applied to persons who had been insured for two or more years and who were no longer in covered occupations and to several other classes of formerly insured workers.

Under the act of 1911, central administration of cash sickness and medical benefits was placed in the Ministry of Health. Special local committees were established (on a county and county borough basis) to administer medical benefits. Chief among these special units are the insurance committees—consisting of 20 to 40 members representing insured persons, local public bodies, and medical practitioners—which enter into agreements with local doctors and pharmacists. On certain matters, these committees must confer with other committees representing all physicians in the area (local medical committees), insurance practitioners (panel committees established under the Insurance Act of 1913), and insurance pharmacists (pharmaceutical committees).

The act of 1911 authorized voluntary, nonprofit societies, on approval of the Minister of Health, to administer national health insurance cash sickness benefits for compulsorily insured persons admitted to membership in these "approved societies." For approval, the constitution of the nonprofit society had to provide that the affairs of the society would be subject to the absolute control of its members.

These approved societies, particularly the industrial assurance companies (which were permitted to set up separate nonprofit sections as approved societies) and the centralized friendly societies, i. e., those without branches, attracted millions of members. From 1915 to 1936, total membership in approved societies in England and Wales eligible for national health insurance benefits increased from 11,758,600 to 15,809,910. The Beveridge Report gives the following distribution of membership by type of approved society in Great Britain and Northern Ireland for the years 1923 and 1938:

Type of society	1923	1938
Total	15, 190, 000	18, 170, 000
Industrial life offices Friendly societies without branches Friendly societies with branches Trade unions Employers' provident funds	6, 870, 000 3, 550, 000 3, 150, 000 1, 510, 000 110, 000	8, 470, 000 5, 140, 000 3, 000, 000 1, 480, 000 80, 000

With larger membership, improved financial status, and improved fiscal policies, many of the approved societies were able to increase the types and amounts of benefits. These societies were authorized, under certain conditions, to use their disposable surpluses for the provision of additional benefits to compulsorily insured persons who had been members for several years. Such surpluses were determined at quinquennial valuations of the societies' funds. Authorized additional benefits included cash benefits, dental and ophthalmic services, medical and surgical appliances, and treatment in convalescent homes and hospitals.

One of the developments of the nineteenth century was the federation of small friendly societies into large organizations. This process of consolidation continued among the approved societies, resulting in an appreciable reduction in their number.

Voluntary Insurance for Medical Benefits.—Although for many years medical aid societies and other organizations had been providing some hospital care for their members in convalescent homes and other institutions financed and maintained by the societies, voluntary hospitalization plans as such are almost exclusively a twentieth century development. Only one such plan had existed before the end of World War I—the Hospital Saturday Fund. Shortly after that war, a number of plans were started to give assistance to the financially distressed hospitals and to provide hospital care and services to contributing members of low income.

The number and membership of these hospital plans grew rapidly. The number of contributors to the Hospital Savings Association, a leading contributory scheme, increased from 15,356 in 1923 to 2,223,765 in 1945. In 1946, the British Hospital Contributory Schemes Association had 250 affiliated local schemes or plans; for that year, the association estimates that membership in these organizations amounted to 11 million contributors, and benefits were said to be available to an estimated 25 to 30 million persons. A survey of 167 hospitals in London (1944) révealed that, on the average, 13 percent of the total ordinary income of these institutions was derived from contributory schemes.

Special provident schemes were organized to provide prepayment methods of defraying the cost of hospitalization, care in nursing homes, and specialists' services, for persons of higher income. The King Edward's Hospital Fund for London sponsors one scheme of this type—the Hospital Service Plan—through the London Association for Hospital Services. The Nuffield Provident Fund sponsors similar plans through the Central Provident Association.

In the field of clinic services, a number of dispensaries depended in part on provident contributory schemes for their support. In

contrast to the growth and development of other prepayment plans, dispensary provident schemes are reported to have declined in importance since the introduction of national health insurance. This drop has been attributed partly to the establishment of public clinics and to the provision of out-patient services by hospital contributory plans.

Exclusively physician-controlled types of voluntary health insurance organizations such as the doctors' clubs and the "public medical services" plans, which were started in the nineteenth century, developed and grew during this period. In the main, these organizations provide general practitioner's services for dependents of compulsorily insured persons and persons of like income. During 1946 there were approximately 80 public medical service plans in operation in which some 6,000 doctors were cooperating. The number of contributors to doctors' clubs and public medical service plans is not known, but one estimate (1944) places the figure in the vicinity of a million.

District nursing associations, formerly dependent almost exclusively on voluntary donations for support, adopted provident contributory schemes to supplement their inadequate funds. In this way, home nursing care is provided to contributing members and their families, and the weekly payments by members help support the services provided for indigent persons in the community.

Before 1912, the overwhelming majority of persons covered by voluntary schemes were workers of relatively low income and dependents of these workers. After 1912, even though this class of persons clearly predominated in the coverage afforded by voluntary health insurance, new plans were developed and existing ones were extended to permit membership of persons with higher incomes. Some public medical service plans and hospital contributory schemes increased the income limits for membership in extensions of their plans or in new schemes. New organizations, such as the Central Provident Association established in 1943, removed all income limits for membership.

Since 1912, both newly created and formerly established national associations and committees have played increasingly important roles in the voluntary health insurance movement. They include the National Conference of Friendly Societies, the National Conference of Approved Societies, the Public Medical Service Subcommittee of the British Medical Association, and the British Hospital Contributory Schemes Association. Such national organizations provide a means for interchanging information on administrative, fiscal, and actuarial management and on other problems common to voluntary health insurance agencies. They have promoted the establishment

of prepayment plans in new areas and for additional groups of the population. Moreover, some of these organizations have been instrumental in achieving a degree of equalization of the contributions and the benefits provided by similar plans.

From the developments during 1912-45, it appears that voluntary health insurance has provided medical care to a greater or lesser extent for millions of persons inadequately covered under the compulsory health insurance system instituted in 1912 and for millions excluded from that system.

Although great progress was made from 1912 to 1945 in providing cash sickness benefits and medical care for the general population through voluntary and compulsory health insurance, the voluntary schemes fell far short of adequately supplementing the existing compulsory system. Coverage was still restricted—because large numbers of persons either could not afford membership, or were bad insurance risks, or did not choose to join. Benefits were still limited—because considerations of membership appeals require relatively low contribution rates, and solvency considerations limit the amount and duration of benefits which the funds can afford. Surveys have pointed out these and other features of the voluntary health insurance system. There is wide divergence in the type, amount, and duration of benefits received for similar contributions. Disproportionately large amounts of contributions are allocated to reserves, and, in some plans, excessive amounts are allocated to collection costs. In many plans there is little if any active participation by consumers of the service in management controls over the services provided. And the very large number of prepayment plans produces competition for membership and duplication of management, administration, operation, and overhead expenses.

To correct these deficiencies, the following types of remedial measures have been suggested: providing Government contributions to cover poor insurance risks and meet costs for the indigent and near-indigent; raising the income limits for compulsory insurance and increasing the classes of insured persons, e. g., dependents and families of insured persons; requiring that approved societies pool their surpluses not only to reduce the amount of reserves needed by individual societies but also to eliminate disparate benefits for similar contributions; eliminating excessive collection costs; instituting improved administrative and fiscal procedures; and providing for active participation in management of societies and funds by consumers as well as by providers of service.

These remedial measures, however, were rejected in Great Britain in favor of an integrated program of increased cash benefits for all social security purposes and a comprehensive system of medical bene-

fits (including hospital care, specialist's and general practitioner's services, and public health preventive services) for all persons irrespective of their insurance status.

National Insurance Acts (1944 and 1946) and the National Health Service Act (1946).—In 1944, the National Insurance Act established a Ministry of National Insurance. Under the provisions of the act and by an Order-in-Council dated 1945, the powers and duties of the Minister of Health under then existing National Health Insurance Acts (except those powers and duties relating to the administration of medical benefits) were transferred to the Minister of National Insurance. Thus, the administration of cash benefits was given to the new Ministry.

The National Insurance Act of 1946 appreciably increased cash benefits for wage loss during sickness and cash benefits for other social security purposes; increased the adequacy of these benefits by providing supplementary payments for dependents of insured persons; and provided for regional and local offices of the Ministry of National Insurance to administer cash sickness as well as other types of social security benefits. Under this act, which is expected to go into full operation in 1948, the approved societies will no longer participate in the administration of compulsory health insurance; their reserves, together with all their other assets derived from national health insurance sources, will be turned over to the new Ministry. Other legislation in 1945 and 1946 increased the scope of cash benefits to be administered by the Ministry of National Insurance.

The National Health Service Act for England and Wales (1946) provides for comprehensive medical benefits for all persons with no restrictions based on age, sex, income, dependency status, or existing or preexisting physical or mental condition. The provisions of this act are also expected to be put into effect in 1948.

With the passage of these laws, the voluntary health insurance movement in England is confronted with the most serious problems in its long history, for many of the administrative, social, and financial functions served by voluntary organizations are assigned to public agencies.

1. Under the original compulsory health insurance system, friendly societies, industrial assurance companies through their "nonprofit sections," trade union benefit funds, and other organizations were authorized, on Government approval, to administer cash benefits for wage losses during illness. Under the new National Insurance Act, the approved societies will no longer administer the cash benefits provided by law. Governmental agencies under the Ministry of National Insurance will handle these as well as maternity, unemployment, old age, and other cash benefits of the insurance program.

The favored position of the approved societies under compulsory health insurance will soon be a thing of the past.

- 2. Since 1912, the chief contribution of the societies and other voluntary health insurance organizations has been that of supplementing the inadequate benefits and coverage of the compulsory insurance system. The schedule of increased cash benefits and the extensive medical services to be offered under the new legislation will cut deeply into this social function of voluntary insurance. Medical benefits under the National Health Service Act will include services of general practitioners, specialists, hospitals, and nurses, as well as pharmaceutical, dental, ophthalmic, maternal and child welfare, home nursing, vaccination, and immunization services. The medical and preventive services are to be improved and extended by the establishment of adequately equipped health centers for the use of general practitioners and local health authorities.
- 3. The National Health Service Act, moreover, provides for governmental administration of all hospitals. The hospitals are to be financed from public funds, supplemented by payments from national insurance sources. Local health authorities are authorized, subject to approval by the Ministry of Health, to enter into agreements with nursing associations for provision of health visiting and home nursing services. With financial support assured, the necessity for voluntary schemes to provide income for hospitals and nursing associations will be obviated to an appreciable extent if not completely.

Future of Voluntary Health Insurance.—The broad coverage and greatly increased benefits to be provided under the new laws will probably result in (1) marked changes in the types of benefits offered through voluntary health insurance, (2) reduced membership in voluntary schemes among low-income groups, (3) liquidation of some of the organizations, particularly those designed to serve low-income groups, and (4) consolidation or federation of some of the remaining voluntary schemes.

Intensive planning has been going on for some time among the approved societies and other voluntary organizations to determine how best to continue after the new system begins to function in 1948. It seems likely that approved society plans will emerge which will offer one or more of the following types of programs for voluntary subscribers: cash sickness benefits to supplement those provided under the National Insurance Act of 1946; special medical appliances and services not provided under the National Health Service; lump-sum payments at specified ages, e. g., 65; and life insurance.

In view of the comprehensive medical services to be offered to all persons under the National Health Service Act, it would appear that the area of medical benefits left to voluntary health insurance will be

narrow. Many plans which were established for low-income groups previously not covered under the compulsory system, including a number of specialized plans offering general practitioner's, hospital, or home nursing services, will probably cease.

Persons in upper and middle-income groups, however, may want to continue to make their own arrangements for medical services. Wealthy persons will doubtless continue to purchase their medical care directly and not through the medium of insurance. A segment of the middle-income population may seek private medical services and pay for such services through voluntary insurance or on some other prepayment basis.

When the new system of comprehensive medical service begins to function sometime in 1948, there undoubtedly will be an excessively heavy load on the medical facilities and personnel of the National Health Service. Persons who now are not covered or are not covered adequately by compulsory or voluntary insurance will seek medical attention not only for current illness and disabilities, but also for preexisting conditions and for preventive treatment which they had neglected or postponed for financial reasons. Many persons who can afford to pay for medical services either on a prepayment basis or otherwise will make such expenditures for private care. Plans now available which are designed for persons of higher income (e. g., Central Provident Association schemes, hospital service plans, and extensions of public medical service plans) may continue in operation.

The move towards greater consolidation of voluntary plans is evidenced in a recommendation made by the Hearts of Oak Benefit Society at the 1946 annual meeting of the National Conference of Friendly Societies, and by a proposal drafted by the Nuffield Foundation, to amalgamate provident schemes and similar plans into a national provident scheme. This scheme proposes to serve "that section of the community which will prefer to make its own arrangements for hospital and specialist medical services."

#### FRANCE

Origins.—In common with other nations of Western Europe, France has had long experience with voluntary insurance against sickness. Soon after the Revolution of 1789, mutual benefit societies, furnishing insurance against sickness, began to organize. At first, the authorities were suspicious of these societies, since they seemed to resemble the medieval trade guilds which were forbidden by law. But the societies soon proved that they were not dangerous to public order and began to gain members rapidly.

<sup>4</sup> Notes on the Proposal for a National Provident Scheme. Mimeographed document prepared by the Nuffield Foundation.

Although by an act passed April 10, 1834, mutual societies were permitted to operate after receiving special authorization, their situation remained precarious, since this authorization could be withdrawn at any time. They received no special powers or legal standing until July 15, 1850, when an act was passed establishing procedures by which mutual benefit societies could become "recognized societies of public utility." This "recognition" gave them certain privileges such as legal status, the right to own property, and freedom from specific types of taxation, and at the same time made them subject to the general supervision of provincial and municipal authorities. In addition, the regulations of recognized societies had to specify conditions for admission of members, rights to benefits, methods of collecting contributions, and the like. The act of 1850 remained almost inoperative, however, because few authorized mutual societies applied for recognition.

Under the decree of March 26, 1852, establishing a new class of "approved" societies, mutual benefit societies were made subject to more stringent legal requirements. Approval was granted to mutual benefit societies whose bylaws were acceptable to the provincial authorities.<sup>5</sup> Approved societies received legal status, exemption from stamp and registration taxes, and the use of a public meeting place free of charge. In addition, they could obtain contributions from public funds and certain other financial advantages. Approved societies were required, in return, to submit to supervision by the prefects (provincial authorities) and the Minister of the Interior; to report annually on their financial condition; and to supply statistics on sickness and other data. Approved societies could be suspended or dissolved by a prefect for violations of their own constitutions or of existing laws, and their presidents had to be chosen by the Government.<sup>6</sup> Furthermore, they could not have less than 1,000 members, both participating and honorary,7 and no more than 500 participating members without the prefect's permission; and their regulations had to establish contribution rates in conformity with approved sickness and mortality tables.

Law of 1898.—The law of April 1, 1898, marking the first important changes in the status of mutual societies under the 1852 decree, set up two categories of mutual benefit societies: free and approved. Both types were required to déposit copies of their constitutions, regulations, and lists of officers with the central authorities before they

<sup>.</sup> In the province in which Paris is located, bylaws had to be submitted to the Minister of Interior for approval.

<sup>&</sup>lt;sup>6</sup> A decree of September 1870 changed this requirement to allow societies to elect presidents according to their own rules.

<sup>&</sup>lt;sup>7</sup> Participating members were those receiving benefits in return for contributions, while honorary members either paid a fixed contribution or made donations to the societies without drawing benefits.

could operate. Thereafter, free societies were not subject to further administrative regulation. Approved societies, on the other hand, remained under administrative regulation but had the right to a national grant, whereas free societies could receive only provincial and communal contributions. Recognized societies, still in existence under authority of the law of 1850, had essentially the same privileges and were placed under much the same obligations as approved societies.<sup>8</sup>

Both free and approved societies were permitted to offer sickness, invalidity, survivors', life, and other types of insurance, and to form federations for reinsurance and other specified purposes. All societies were required to furnish annual reports to the Minister of the Interior, and all were restricted by the law with regard to the disposition of their savings and investments, but approved societies were more closely restricted than free ones. On the other hand, approved societies had the right to buy, sell, and own real estate up to three-quarters of their assets, and to receive bequests and donations without restriction, whereas free societies could own only the real property needed for administrative purposes, and had only a limited right to receive bequests and donations. Approved societies received, in addition, certain special financial advantages, and were exempt from all stamp, registration, notarization, and certification taxes. The law also specified that contributions from public funds were to be refused to approved societies which granted their members average daily indemnities of more than Fr. 5,9 annual pensions of more than Fr. 360, or lump-sum payments of more than Fr. 3,000.

According to the law, approval could be refused only if a society's bylaws were not in conformity with the law's provisions or if it failed to provide for receipts proportionate to its expected expenditures. The bylaws had to specify, among other things, the conditions and methods of admission and exclusion of members, method of election of members of administrative councils and nature of their powers, rate of contributions, and methods of investing and withdrawing funds.

The law of April 1, 1898, continued, with a few minor amendments, to govern the activities of mutual benefit societies until 1945. Under its influence, approved mutual societies grew in number, but the benefits they furnished remained restricted, and even the relatively small contributions required for membership could not be paid by many industrial workers. Members of the societies appeared to be drawn, in general, from among salaried persons, better-paid skilled workers, and small farmers. The growth of mutual benefit societies for

<sup>&</sup>lt;sup>8</sup> Since 1903, recognized societies have not been distinguished from approved in official statistical reports, and only one recognized society has been chartered since 1898.

In 1900 the French franc had a value of about 19 cents; at present it is worth about 310 of a cent.

school children was stimulated markedly after the passage of the law, which placed them in the class of approved societies. First organized about 1880, school societies provided sickness insurance and collected contributions toward retirement pensions for children from 3 to 16 years of age.

Contributions to approved societies varied with the type of society and the nature and amount of benefit offered. A characteristic contribution in 1910 was Fr. 1 monthly per member, with an additional contribution usually required for family coverage. Most of the societies were small, even after 1898, and 90 percent of them furnished sickness benefits, either exclusively or coupled with some other insurance benefit. Although daily cash indemnity was the chief sickness benefit offered by the societies during this period, many gave medical benefits too, and some employed their own doctors.

The tabulation below gives some indication of the growth of approved societies in terms of membership and medical benefits rendered from 1854 to the establishment of the compulsory health insurance system:

Year 1	Number of approved <sup>2</sup> societies reporting	Insured members <sup>3</sup> as a per- cent of total pop- ulation	Medical benefits 4 as a per- cent of total ex- penditures for sick- ness	Year <sup>1</sup>	Number of approved <sup>2</sup> societies reporting		Medical benefits 4 as a per- cent of total ex- penditures for sick- ness
1854	787 2, 274 4, 263 4, 790 6, 433	0.3 .7 1.4 1.8 2.4	<sup>8</sup> 42. 4 <sup>6</sup> 23. 9 42. 4 47. 4 48. 9	1900 1910 1920 1930	9, 009 15, 832 15, 928 18, 496	3. 7 8. 0 7. 9 14. 4	47. 9 47. 5 52. 6 54. 8

<sup>1</sup> Statistical data on which this table is based are contained in references (34 and 37).

Status Under Compulsory Insurance Law (1928).—The enactment of compulsory insurance legislation in 1928 (modified in 1930) placed voluntary health insurance as administered by mutual benefit societies on a new basis. To comply with the provisions of the law, most of the mutual societies created special funds, legally distinct from their founding societies and federations, which, when approved as official insurance funds, were permitted to administer compulsory

<sup>&</sup>lt;sup>2</sup> Represents societies for adults granting all types of insurance benefits; approximately 90 percent of them gave sickness benefits either exclusively or along with other benefits. From 1854 to 1871, the figures represent all existing approved societies; thereafter, they represent approved adults' societies reporting their operations.

operations.
3 Represents participating members only. From 1880 on, figures used to derive percentages include child members of adults' societies. Figures used for total population represent official annual midyear estimates of the number of French residents.

<sup>&#</sup>x27;Total expenditures for sickness by approved adults' societies include: administration, cash benefits, doctors' fees, and drugs. Administrative costs include those for invalidity, old age, and other benefits, as well as sickness insurance, since no separate figures for administration each type of benefit are available. Medical benefit costs represent the sum of expenditures for drugs and doctors' fees.

<sup>Data not available for administrative costs.
Data not available for drug expenditures.</sup> 

benefits. The parent organizations continued as mutual societies, however, for purposes of granting supplementary voluntary insurance. In addition, separate funds were created by the authorities in each province to administer compulsory benefits to insured persons who did not join a mutual society fund. Both the mutual society funds and the provincial funds were organized under the legal form of mutual benefit societies, although their functions were limited to the provision of compulsory and specific voluntary benefits.

The compulsory social insurance system, which went into effect in 1930, covered, in general, persons from school-leaving age to age 60 (and certain classes of their dependents) employed in commercial. industrial, and agricultural occupations, if their earnings did not exceed a set maximum. It provided cash and medical benefits during illness. and invalidity, maternity, survivors', old age and death benefits. Voluntary insurance with the funds furnishing compulsory sickness insurance was permitted to certain groups not covered compulsorily for these benefits, such as small shopkeepers, artisans, self-employed nonmanual workers, small farmers and sharecroppers-in general, anyone of French nationality depending principally on his work as a means of livelihood, provided that his annual earnings did not exceed the income limit for compulsory insurance. In addition, those not eligible for compulsory insurance were left free to insure themselves with mutual benefit societies, as were those compulsorily insured who wished to procure supplementary benefits. Those voluntarily insured with compulsory insurance funds were required to pay contributions quarterly, the amount of their contributions to be fixed by the insured themselves up to a maximum of 10 percent of their annual earnings but not less than Fr. 240 per year. The insurance funds had to keep separate accounts for voluntarily and compulsorily insured individuals. and were not permitted to guarantee cash sickness benefits in an amount exceeding Fr. 25 per working day to those insured voluntarily.

Voluntary insurance with the compulsory insurance funds, as provided for in the law of 1928, was abolished in 1935 owing to the small number of eligible individuals who had applied for it since 1930. In 1933, for example, only 12,000 persons in nonagricultural occupations were paying contributions for this type of voluntary insurance. Insurance on this basis remained open, after 1935, only to an insured man's nonworking wife and certain classes of agricultural workers and their dependents.

New Laws 1945-46.—With the liberation of France from German occupation in 1944, extensive revisions of the French social insurance system were begun, and voluntary insurance, as well as compulsory, was

reorganized. As a result of the various laws passed in 1945 and 1946 regulating the provision and administration of insurance benefits. the functions of the funds organized by the mutual societies for administering the benefits of the 1928 law are taken over by newly created primary and regional funds, which are quasi-governmental agencies established on a geographic basis and controlled democratically by their members. Voluntary insurance with these new funds is now limited to two groups: (1) those who, having been compulsorily insured for at least 6 months, cease to fulfill the conditions for compulsory insurance; (2) members of an employer's family who work in his enterprise without pay, on condition that they are not more than 40 years old at the time of application. Contributions for this type of voluntary insurance must be paid monthly for the preceding month to the primary insurance fund nearest the contributor's residence. Failure to pay the contribution for three consecutive months causes the insurance to lapse. With certain exceptions, contributions of voluntarily insured individuals secure coverage for the same dependents as do those of compulsorily insured persons, and the voluntarily insured are entitled to all benefits of compulsory insurance except cash benefits for sickness and maternity.

Although the new legislation extends compulsory social insurance in France to virtually the entire population by abolishing all income limits and most occupational restrictions, some room is still left outside the system for mutual benefit societies to supply additional voluntary benefits to those who desire and can afford them.

A new ordinance redefining the status of mutual benefit societies, passed on October 19, 1945, indicates the areas in which such societies are expected to concentrate their work in the future. Rules for approval and the general administrative and financial powers of societies offering voluntary insurance are not changed very much under the new act; but some of the societies' goals have been substantially altered. What these new objectives will mean in future practice is best exemplified in the types of facilities and services which the societies, under the new law, are expected to provide, with the aid of grants from public funds specifically to encourage their provision. These include dispensaries, maternity clinics, children's consultation bureaus, rest and retirement homes, pharmacies, and dental officesin general, all types of organizations for prevention, care, and cure of illness. Besides furnishing such services and facilities, the voluntary societies will continue, under the new law, to offer health insurance benefits supplementing those of the compulsory system.

# BELGIUM

Origins.—Mutual benefit societies in Belgium stem from the same roots as those of the self-help movement in other countries of Western Europe. Official recognition and national support of the movement in Belgium, however, gave relatively little stimulus to the development of voluntary sickness insurance through these societies until the first decades of the twentieth century. Lacking adequate aid from public funds, gaining relatively little advantage from legal recognition, and developing without any centralized effort toward uniformity of standards, sickness funds led a precarious existence. A Belgian official, in a report to the Third International Congress of Actuaries in 1904, said that they lacked the necessary requirements of a safe and rational organization, adherence to the principle of equal distribution of resources, and adequate accounting systems.

Early in their history, Belgian societies tended toward organization on a geographic rather than an occupational basis, but within each locality, Catholics, socialists, liberals, and independent or "neutral" political groups formed "closed" societies with membership restricted to persons of similar religious or political views. No legislative action was taken to prevent this stratification, though other efforts during the 1900's helped to effect wider distribution of resources and risks.

A commission, appointed by the Belgian Government in 1843 to study the economic conditions of workers, concluded that mutual benefit societies were an essential means of relieving misery. To stimulate their development, a ministerial circular was issued on April 17, 1849, instructing governors and mayors to call meetings of employers and ask them to encourage the formation of these societies. The first Belgian law on mutual benefit societies, enacted 2 years later, permitted them to obtain official recognition and legal status through voluntary registration. Such recognition carried the advantages of exemption from certain taxes, but also imposed several restrictions on societies offering sickness benefits. They were prohibited from insuring any long-term risk, from owning any real estate, from accepting substantial gifts or legacies, and from making loans; and on liquidation, their assets were virtually expropriated by the Government. Few societies applied for registration.

As a stimulus to the mutual aid movement, a Royal decree of April 9, 1862, offered small prizes to societies that submitted annual reports to local authorities and made the best showing. Little was accomplished by this means, but 25 years later, "propaganda" committees, established in each province to further the movement, achieved some success.

Law of June 23, 1894.—The permanent commission on mutual benefit societies, established in the Ministry of Agriculture, Industry, and Public Works in 1851, was then asked to draft a bill for legislative action in the field of mutual aid. The recommendations of this commission, embodied in a bill introduced on May 17, 1890, proposed substantial liberalization of the restrictive provisions of the law of 1851, to permit societies to extend their sphere of activities, acquire administrative autonomy, gain recognition more easily, form federations, and, on dissolution, have the right to divide their assets among members.

These steps were taken in the law of June 23, 1894, which repealed that of April 3, 1851. For approval, a sickness benefit society had to submit its constitution, defining its purpose, and the regulations governing membership, nomination and powers of members who served as administrators, contributions, benefits, financial accounting, administrative procedures, and provisions for dissolution and liquidation of assets. Approved funds were required to invest their reserves in specified banking institutions or securities and had to submit annual reports of receipts and expenditures to the permanent commission. No benefit standards for approval were stipulated, nor were restrictions placed on membership. The approved funds might accept as members any person aged 18 or over and children under age 18 with the consent of their parents or guardians. Married women could enter or retain membership unless their husbands objected in An amendment enacted on March 19, 1898, provided for contributions from public revenues to approved funds and their federations.

Progress During the Early 1900's.—The number of approved sickness funds and their membership increased fairly steadily in the first decade of the twentieth century, particularly in the highly industrialized provinces of Belgium. The Government contribution to these funds was smaller than that granted to approved old-age insurance funds, and voluntary sickness insurance lagged behind old-age insurance. Shortly before the century opened, approved sickness funds represented 97 percent of all approved mutual benefit societies, while about 10 years later they were only 36 percent. According to one authority, the entire membership of sickness funds included only about one-fourth of the Belgian working population, for "only the elite of the working class could afford the cost of sickness insurance."

A significant stage in the development of sickness funds occurred soon after the legal restrictions on the formation of federations were lifted. The primary mutual benefit societies began to federate, and

these federations established reinsurance funds that provided sickness benefits for persons whose illness was of longer duration than the 3 or 6 months for which they could receive benefits from the primary society.

Beginning with 1904, special public grants were paid to these reinsurance, continuation, or invalidity funds, and, an act of May 5, 1912, stipulated more detailed requirements for receipt of these grants. Primary and invalidity benefit societies for Catholic, socialist, liberal, and neutral groups were organized in district federations, which in turn were united in national alliances, leagues, or unions, providing some degree of Nation-wide distribution of risks and resources for each group and a more centralized system of management and supervision.

Perhaps the most significant development in the voluntary system, however, was the stimulus given in the 1920's to the provision of medical and pharmaceutical benefits for insured persons and their dependents. Under provisions of ministerial circulars of February 20, 1920, and December 31, 1922, sickness funds with at least 25 members, which required specified minimum contributions for this family medical care, received Government grants geared to the total amount of members' contributions for this purpose. Many funds were soon established solely for this family medical service. In addition, some primary funds and reinsurance funds, which had formerly limited their benefits to insured contributors or to cash payments, availed themselves of public aid in providing medical benefits for the members' young children, wives, and dependent parents. Of further significance, from the standpoint of the distribution of risks and financial stability of voluntary health insurance, was the act of June 30, 1923, which permitted sickness funds to amalgamate without going through the legal formalities of dissolution and liquidation of their assets.

It is difficult to form a composite picture of Nation-wide developments in the voluntary health insurance offered by mutual aid societies in Belgium over the years. The many different types of societies and the variations among them in risks covered, contributions required, and benefits provided, as well as the lack of comparable or consolidated information reflect their freedom from regulation, standardization, and control. Some funds offered maternity benefits; some provided separate insurance against the risk of tuberculosis; some provided invalidity benefits either directly or through their affiliated funds; some were linked with the national fund for voluntary old-age insurance.

The tabulation below gives, for a series of decades, some indication of trends in coverage and medical benefits under voluntary health

insurance in Belgium. Information on the contribution from public funds is not available:

Year <sup>1</sup>	Number of recognized societies <sup>2</sup>		Medical and phar- maceutical benefits as a per- cent of total ex- pendi- tures <sup>‡</sup>	Year <sup>1</sup>	Number of recognized societies <sup>2</sup>		Medical and phar- maceutical benefits as a per- cent of total ex- pendi- tures 3
1853 1866 1875	13 78 171	(4) 0.2 .5		1900 1910 1920	1, 687 3, 109 2, 810	2. 9 5. 6 19. 4	23. 6 55. 6
1886 1891	220 397	.5	20.3	1930 1940	2, 939 2, 527	34. 6 37. 2	68. 4 73. 5

4 Less than 1/10 of 1 percent.

The new compulsory social security program, established in Belgium under its law of 1944, cuts across most of the complexities of the voluntary system and bridges many gaps in protection, at least for workers in industrial and commercial employment and the dependents of these workers. Aspects of the mutual aid principle are preserved in the continuance of national unions, district federations, and primary societies in the administration of medical, cash sickness, maternity, and invalidity benefits. Employers and employees, however, contribute toward these benefits by paying a periodic, joint, unified contribution for all components of the national social security program. A national sickness and invalidity insurance fund safeguards the financial structure of the health insurance system, by setting standards for reserves and by distributing public funds toward support of the system.

Voluntary Insurance Under the Compulsory Program.—The new law permits persons who were voluntarily insured in a mutual benefit society affiliated with an approved national union to count periods of such voluntary insurance toward eligibility requirements for maternity benefits when they enter employment covered by the compulsory system. It also provides opportunity for maintaining, through voluntary insurance, an insured status during temporary shifts from covered to noncovered employments. Furthermore. persons in receipt of invalidity or old-age pensions may insure themselves and their dependents for medical benefits under the compulsory system by paying fixed monthly contributions.

Beyond these provisions, the continuance of voluntary health

<sup>1</sup> Data computed from figures in references (40 and 41).
2 Data for 1853-86 represent all recognized mutual benefit societies and their active members; for 1891-1910, they represent the number of recognized sickness societies reporting and their active members; for 1820-40, they represent the number of recognized sickness societies reporting, while membership represents the total number of persons eligible for medico-pharmaceutical services.
3 Total expenditures represent the costs of administration, cash sickness benefits, and medical treatment for reporting societies and those giving medico-pharmaceutical service; expenditures for funeral benefits are excluded.
4 Less than 16 of 3 records

insurance by these unions and their affiliates would appear limited, for regulations issued by the sickness and invalidity fund prohibit mutual benefit associations used in the compulsory system from providing any additional benefits without special permission. These associations must first build up reserves. Subject to approval by the appropriate national authority, when the reserve for a union exceeds Fr. 30<sup>10</sup> per member, the excess may be used for special medical and hospital facilities for insured persons, and when it exceeds 20 percent of the 3-year average annual income, supplementary benefits may be granted.

Estimates indicate that the compulsory health insurance system at the outset covered some 1.2 million employed persons and their dependents, or about half the total population. Information is not yet available on its extension to other groups of persons, or on the degree to which the compulsory system has affected voluntary insurance against the risks and costs of illness.

### **SWEDEN**

Vestern Europe, the precursors of sickness benefit societies were the medieval guilds. The cooperation of persons with similar occupational or other interests continued after certain guild controls ceased in 1864, and gained new impetus in the 1870's when various clubs, societies, and other associations were formed in large Swedish cities. The main stimulus to health insurance, however, arose from the activities of trade union and temperance societies in the 1880's, for most of these groups provided sickness benefits for their members. Subsequently, many societies were formed solely to give such benefits; furthermore, as industrialization developed, many employers established sickness benefit clubs for their workers.

The first Swedish law on health insurance was enacted on October 30, 1891, and became effective on July 1, 1892. It was based on proposals drafted in 1884 by a committee on workers' insurance. The law made no attempt to force mutual sickness benefit societies into any required pattern, but offered a small contribution from national revenues toward administrative costs of societies that registered and were approved as meeting certain requirements relating to size of membership, fiscal controls, and administrative procedures. Application for registration and approval was to be made to Royal authorities in rural districts, the Governor in Stockholm, and the mayor in other cities.

Basic Changes, 1900-30.—In 1903, the Riksdag called on experts to make a thorough study of voluntary insurance and to recommend steps for control of the "unbusinesslike activities of benefit societies."

<sup>10</sup> The Belgian franc, valued at about \$0.19 in 1900, is now worth about \$0.02.

As a result, a bill was introduced on December 2, 1905, setting up more detailed requirements for registration and approval of mutual benefit societies, including sickness funds as well as other groups. No action was taken, however, and when the new Benefit Societies Act of 1912 required all noncommercial mutual insurance societies to register for official approval, those providing sickness benefits were specifically exempted.

The first significant legislative change in the health insurance system was brought about by the act of July 4, 1910, effective January 1, 1911. It was based on proposals introduced on June 30, 1909, by a committee of experts and embodied many recommendations of mutual benefit societies which they believed would strengthen the financial position of small sickness funds. The new law preserved the entirely voluntary aspects of registration and application for approval and left to groups of people the initiative of forming and administering benefit societies for mutual protection. Approval, however, carried more substantial rights as well as more stringent requirements. The contribution from national revenues was greatly increased and divided into three parts, a flat annual sum per member, plus a small amount for each day, excluding Sunday, for which the sickness fund provided as much as Kr. 0.90 11 for hospital treatment 12 during the preceding year, plus one-fourth of the fund's expenditures for medical fees and medicines.

Approval was accorded only to local sickness funds with at least 100 members (or in very sparsely settled northern areas, a minimum of 25 members), and an approved fund was obliged to liquidate, unless approved for subsequent operation by inspectors, if its membership dropped below the level required for approval and failed to regain that level within 3 months. The regulations of the fund had to indicate the conditions of membership; benefits provided; methods of determining contributions, investing funds, and supervising fiscal management; frequency of general meetings; methods of communicating with members; and provisions for steps to be taken n the event of dissolution. Each fund had to collect fixed contributions from its members in amounts sufficient to meet current expenses and build a necessary reserve. Additional assessment of members was permitted only if the fixed contributions proved insufficient. The law also required central supervision of all approved sickness funds to assure that the objectives of the law were met. At first, the Royal

<sup>11</sup> In 1900, the Swedish krona was worth about \$0.27; its present value is about \$0.28.

<sup>&</sup>lt;sup>13</sup> As they have developed in Sweden, nearly all hospitals are public institutions, financed and administered by the county, city, or National Government. Ward care in these institutions is available at little or no charge to any resident of the community served by the hospital. That care, moreover, includes the free services of the staff physicians, surgeons, other specialists, nurses, and technicians. Whether the ward patient is insured in an approved sickness fund or not, the major cost of his treatment is financed from public resources; rich and poor alike use ward facilities.

Bureau of Commerce exercised this supervision, but the function was transferred to the Social Board when it was established in the Ministry of Social Affairs in 1912.

The act of 1910 prohibited membership in more than one approved local fund but set no age, health, occupational, or income restrictions on membership; on the other hand, it made no attempt to eliminate or modify any membership restrictions that approved funds might impose. Approved funds could not expel members, however, because they had reached a given age, suffered from ill-health, or received extensive benefits.

Penefits had to include at least hospital treatment, or medical and pharmaceutical assistance, or—if the member was arranging for medical care himself—a cash benefit of at least Kr. 0.90 a day. The fund was not obliged to provide benefits, however, unless the illness caused appreciable reduction in working capacity, and no cash benefits could be granted unless the illness lasted at least 3 days. The maximum duration of benefits had to be at least 90 days in each 12 months, though this period might be shortened when some specific disease sharply increased morbidity or death rates in a fund's territory.

The first effect of this law was to reduce the number of approved sickness funds, through liquidation of small ones or their amalgamation with others. Continuation funds were set up by groups of small sickness funds to provide a form of reinsurance, so that benefits could be payable for a longer period than the small fund could finance. For approval, these continuation funds had to have at least 500 members.

Legislation in the 1930's.—During 20 years of operation under the law of 1910, substantial grounds for modification of the Government-supported voluntary health insurance system were revealed. A series of laws issued on June 26, 1931, radically revised the system by instituting changes to be effected in 1932, 1935, and 1938. Under the new statutes, the regulations of an approved sickness fund had to specify that admission would be denied to all except healthy persons aged 15-50 (40 could be and usually was the upper age limit, however) who were not suffering from a defect that would or might substantially reduce their working capacity or call for extensive medical care. approved fund could deny admission to any resident of the area in which it operated if the applicant was in good health, and aged 15-40. No income restriction was placed on admission to membership or insurance for cash benefits, but persons whose income and property assessment for tax purposes exceeded Kr. 8,000 could not insure for medical benefits in approved funds. (This income restriction was abolished at the end of 1944.)

An approved fund had to furnish sickness benefits in the form of

compensation for costs of medical care and daily cash allowances and maternity benefits. Compensation for a doctor's care had to be without time limit, but cash sickness and hospitalization benefits might be limited to a period of 2 years for one continuous illness. sickness benefits could not be more than Kr. 6 a day unless the Government authority granted special permission, and these benefits could not be paid unless the illness caused at least one-fourth reduction of working capacity or unless a physician certified that the patient should refrain from work. Members who insured their children under age 15 could receive compensation for the medical expenses of their children's illness. The form of medical benefits was, in general, free hospitalization and reimbursement, up to two-thirds of the amounts set in an approved fee schedule, for doctor's fees-(including the doctor's mileage for home visits) and costs of medicines. An approved sickness fund's right to provide funeral benefits was withdrawn.

In the changes of the 1930's, competition among funds was lessened by stipulation that, in general, a given area could have only one approved fund, though exception was made for factory or other employer funds operating for a single establishment or industry. Each local fund had to be attached to a central fund for the area, and each member of the local fund had to be indirectly affiliated with the central fund, which paid benefits, as the former continuation funds had done, after the member's rights in the local fund were exhausted. The central funds also provided all benefits for their "direct members"—persons living in a locality without a local fund. These organizational changes virtually prohibited approval of closed funds, i. e., those which limited their membership to persons of specified sex, political, or social group.

In 1938, supervision of the voluntary health insurance system was transferred to the Pension Board in the Ministry of Social Affairs. With increasing contribution from national revenues and special support for maternity benefits and obstetrical care, the voluntary system continued to expand (chart 1). By 1938, all sickness funds had to register, regardless of their size, but only those that wanted to participate in the national system applied for approval and financial support from public revenues.

The sickness benefit societies outside the approved system numbered 486 at the end of 1944, and they had 466,000 members, as compared with 566 societies with 262,000 members at the turn of the year 1935–36. The assets of these societies increased in the same period from Kr. 10,000,000 to Kr. 20,700,000, including the assets for paying funeral benefits which were provided by all but 160 of these societies at the end of 1944.

Voluntary Insurance Under the Compulsory System.—Proposals for compulsory health insurance introduced in the Riksdag as early as 1910, and again in 1919, 1920, and 1938 gained relatively little support, for the people of Sweden preferred to avoid any aspect of compulsion in this field of social insurance. At the end of 1946, however, after a report presented by a committee that started its investigation in the autumn of 1938, a compulsory health insurance law was passed, and was approved by the Crown on January 3, 1947, to become effective July 1, 1950. This new law will provide health insurance coverage for the entire population.

Public revenues will continue to support the voluntary health insurance movement in some degree. Central funds may be approved to receive a Government contribution amounting to one-fifth of their annual expenditures for supplementary benefits through voluntary insurance. Only persons who are in good health and have not reached age 55 may be insured for these supplementary benefits, and they must serve a 3-month qualifying period if they enter without medical examination. The subsidy for supplementary medical benefits will be only for physiotherapy, and the supplementary cash sickness benefit will be limited to an amount which will prevent the insured person from receiving in a day of illness more than 1/360 of his annual income from gainful work. The comprehensive coverage and protection of the compulsory system, and the parallel proposal for universal, free hospitalization and free or cheaper drugs and medicines, would seem to leave a relatively narrow field for voluntary insurance for medical care.

# DENMARK

Origins.—When the sickness benefit societies of the guilds were abolished in Denmark by an act which became effective on January 1, 1862, the journeymen's clubs were permitted to form voluntary societies to which they could transfer their health insurance activities. Many voluntary sickness funds were thus established and, by 1885, they and similar organizations formed a country-wide network with some 120,000 members. Most of the members were in the low-income groups, but many wealthier persons, to give support to the movement, contributed as honorary members. Some municipalities granted these societies official recognition and financial aid. In Copenhagen, for example, when need was proved, members of the recognized societies received treatment at reduced rates in the municipal hospital <sup>13</sup> and free medical treatment for their wives and children. Many of the societies, moreover, had arranged with physicians for service at low charges. In the main, however, the regular

<sup>12</sup> Hospitals in Denmark are administered and financed as in Sweden; see footnote 12.

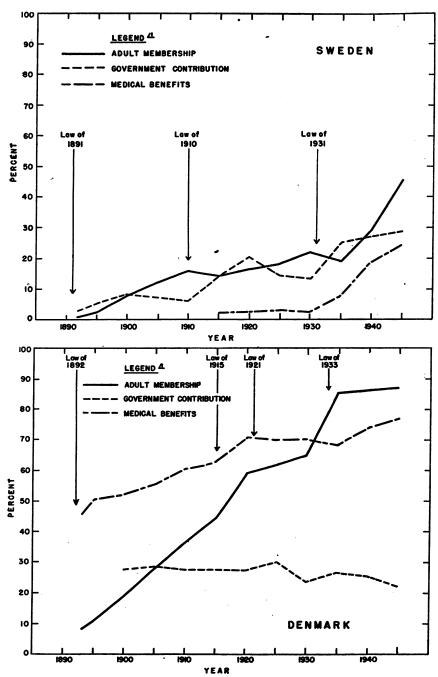


Chart 1.—Trends in membership, Government contribution, and medical benefits under voluntary insurance administered by approved sickness funds in Sweden <sup>3</sup> and Denmark.<sup>3</sup>

(Continued on page 759)

<sup>&</sup>lt;sup>1</sup> The curve for adult membership represents the number of members aged 15 and over, shown as a percent of the total population of that age group.

The curve for Government contribution represents the amount paid to approved sickness funds by the

contributions of members were not sufficient to finance sickness benefits, and money to cover deficits had to be raised by other methods.

Meanwhile, the Danish Government had appointed four successive committees, in 1861, 1866, 1875, and 1885, to study sickness insurance. The report of the last, issued on October 31, 1887, recommended that the voluntary sickness benefit funds should be used as the basis of a national organization, through formal recognition and contributions from national revenues, under certain standards and controls. These recommendations were incorporated in the Sickness Fund Act of April 12, 1892, which became operative on August 1 of the same year.

The act of 1892 provided for voluntary registration of sickness funds. Approval could be granted to voluntary, self-governing societies with 50 or more members, on condition that membership was open to anyone in the locality, trade, or establishment who was "without means," 14 aged 15-45, and not suffering from chronic or incurable disease. The act further specified that no one could belong to more than one approved fund or, through additional insurance in a nonapproved fund, acquire rights to benefits exceeding his earnings.

In this initial statute, the Danes set certain minimum benefit standards for approval: free medical care was required for insured persons and their children under age 15; cash benefits were set at a minimum of Kr. 0.40 a day, but not more than Kr. 2.15 payable for as much as 13 weeks. The fund was required to operate on an economically sound basis, and to permit inspection by public authorities. The Government inspector-general was to be assisted by a committee of delegates elected by the managing boards of sickness funds them-The Government contribution to approved funds was to represent Kr. 2 a year per member, plus one-fifth of the annual contributions of members. The intent of the law was that this subsidy would at least cover the fund's expenditures for medical care.

There was no rush for registration and approval. Many of the richer funds were already granting benefits in excess of the minimums, and they resented being classed with poorer ones. In addition, considerable apprehension over possible "interference and control" was

<sup>14</sup> The Danish word "ubemidlede" is variously translated as "impecunious," "unpropertied," or "moneyless." In application it connotes persons dependent on wages, salary, or other earnings from gainful work, whose income is not above the average for full-time skilled employment, and whose property or capital does not exceed certain limits set every 3 years for various types of localities. It does not mean indigent or needy, but designates, rather, persons with average incomes.

<sup>16</sup> In 1900, the Danish krone had a par value of about \$0.27; at present it is worth about \$0.21.

National Government, shown as a percent of the funds' total income from members' contributions, National and local governments, interest on reserves, and miscellaneous sources.

The curve for medical benefits represents the amounts paid by approved sickness funds for medical and hospital treatment, shown as a percent of total expenditures for cash sickness and cash maternity benefits, medical benefits, and administration; expenditures for funeral benefits are excluded. The medical benefits do not include the share of medical expenses for which the insured person is not reimbursed by the sickness fund or the hospital costs for insured persons which were financed directly from public revenues.

2 Data for Sweden were compiled from references (7, 10, 44, 47, 49).

2 Data for Denmark exclude State-inspected funds for persons of higher income level, and the fund for employees of the railways; membership includes passive as well as active members; the data were compiled from references (7, 10, 52, 54, 55, 57).

expressed. It was clear, however, that aid from public funds was needed, since few sickness funds were in sound financial position, many had high proportions of members in older age groups, and contribution rates were too high for the poorest persons to afford. Within a few years the number and membership of approved sickness funds rose sharply (chart 1).

No small part of the success in removing antagonism and fear is ascribed to the tact and efficiency of the first Inspector-General, Th. Sörensen, a practicing physician, and the committee which worked with him. Confidence of the sickness fund directors and members was gained through meetings and discussions of policies and methods, and plans were formulated and placed in operation in a relatively short time. Most funds were small; more effective distribution of risks was effected by their affiliation with central unions which provided reinsurance for long-term illnesses such as tuberculosis and mental diseases. These central unions also drew up agreements with doctors of the area for the provision of medical services.

Changes in 1915-30.—A new law enacted on May 10, 1915, and effective in 1916, replaced that of 1892 but preserved its main features. The Government contribution to approved funds was increased to one-fourth of the fund's expenditures for statutory benefits; communes were authorized to pay the membership dues of needy persons, and were required to offer hospitalization for sickness fund members at reduced rates. It was also incumbent on communes to provide free transportation to members in rural areas for visits to doctors, if the patient lacked horse and wagon, and to furnish transportation for doctors and nurses in their calls at insured persons' homes; in urban areas, they had to furnish transportation to the hospital if a doctor indicated the necessity.

Under the new law, approved sickness funds could not deny admission to persons with chronic diseases or defects, if other conditions of admission were met, but benefits could be withheld during periods of illness resulting from the chronic ailment. Sickness funds were also authorized to admit as "passive" members (i. e., contributors without benefit rights) persons whose economic status was above the level for active membership.

A significant change in the health insurance program resulted from the establishment of a contributory invalidity insurance system, under the law of May 6, 1921, which resulted in an amended sickness insurance law of June 21, 1921, effective on October 1 of the same year. As of that date, approved sickness funds had to admit as active members persons "without means" who suffered from chronic or incurable diseases or defects, if such persons were capable of any work and were not suffering from some temporary illness or an acute phase of their chronic condition. To reduce the financial burden on funds which would result from admission of these poor risks, the National Government and communes would each bear three-eighths

of the costs of benefits to these active members in excess of the fund's average annual expenditures for benefits to all other active members. The membership contribution from national revenues was increased to Kr. 3 per year per member, and the Government's share of one-fourth the fund's expenditures for statutory benefits was extended to include the same share of expenditures for optional benefits, such as medicines, dentistry, nursing, and care in convalescent homes.

Under the law of 1921, a maternity benefit of at least Kr. 1 a day was required of all approved funds and was payable for as much as 10 days if the insured woman was obliged to stay in bed that long. The act also set the minimum cash sickness benefit at Kr. 0.50 a day, and the maximum at Kr. 6, or not more than four-fifths of the insured person's earnings. The required duration of these benefits was extended to 26 weeks for illness which continued that long.

Financial requirements for approved sickness funds under the law of 1921 specified that each fund must levy contributions at such rates that, in conjunction with other income, they would suffice to meet obligations and form a reserve equal to average annual expenditures during the preceding 3 years in excess of the Government contribution. The grant from national revenues was greatly reduced by the act of July 14, 1927, under which the membership contribution reverted to Kr. 2, and the Government's share of benefit expenditures became a flat annual amount, rather than 25 percent of the fund's outlay. Furthermore, if the official authority <sup>16</sup> approved and the weak financial position of a sickness fund warranted the action, members could be required to bear as much as one-fourth of the costs of doctors' care.

An act of March 27, 1929, provided Government inspection and control of voluntary health insurance for persons with "means," but authorized no financial support from public funds. Under this system, persons whose economic status precluded admission to, or continuance of active membership in, the subsidized sickness funds could become active or passive members of separate benefit societies or separate departments of the subsidized funds. If they insured for benefits, active members with "means" paid higher contributions to compensate for the lack of Government contribution on their behalf. In general, their benefits consisted of cash sickness benefits and partial reimbursement of medical expenses.

New Laws Enacted in 1933.—On May 20, 1933, the Rigsdag approved four new statutes, providing a comprehensive social security

<sup>16</sup> The Sickness Fund Inspectorate (later Directorate) was first placed in the Ministry of Interior, where it remained until it was transferred to the Ministry of Social Affairs, established by an act of April 23, 1924, The latter Ministry was abolished by an act of December 14, 1926, establishing the Ministry of Health. which, in its brief existence, was responsible for approval and supervision of sickness funds. The act of April 30, 1929, subsequently abolished the Ministry of Health and assigned part of its functions to a Board of Health in the Ministry of Interior and transferred its sickness fund responsibilities to the reestablished Ministry of Social Affairs.

system and embodying provisions for health, invalidity, and old-age insurance, workmen's compensation, unemployment insurance, and public assistance. The changes effected in the voluntary health insurance program related more to integration of that system with compulsory invalidity insurance and noncontributory old-age pensions than to substantive amendment of the earlier provisions for health security. The new act, however, limited the duration of sickness benefits to 60 weeks in three consecutive fiscal years, by providing that a member would be transferred from active to passive status at the end of that benefit period.

Insurance for medical, cash sickness, and maternity benefits continued on a voluntary basis, but an element of compulsion was introduced by requiring that all persons of working ages who could make some contribution toward self-support should be at least passive members of subsidized sickness funds or Government-inspected non-subsidized benefit societies. If they failed to join one of these institutions, they were subject to fines for contribution arrears and were ineligible for invalidity benefits or old-age pension. Public assistance to such persons, moreover, involved a loss of the right to vote.

Voluntary Health Insurance of the Present.—Although the reform of 1933 required nearly all persons of working age in Denmark to maintain membership in a mutual benefit society of the health insurance program, that program remained and still is nominally voluntary. Compulsion relates only to invalidity insurance, toward which persons must contribute about Kr. 10 a year. Since that compulsory contribution is normally collected only by the sickness funds of the health insurance system, each contributor must be either an active or a passive member of one of those funds. By paying about Kr. 42 more a year to a nonsubsidized fund, a person whose economic status is above that which permits active membership in a subsidized fund may insure himself and his young children for medical benefits in a Government-inspected mutual benefit society. When his "means" do not preclude active membership in a subsidized fund, he and his children can be insured for medical benefits if he pays about Kr. 20 a year more than he is obliged to pay for invalidity insurance. that event, he will also be entitled to a small cash benefit to compensate for loss of earnings during his own illness. Of the 2,890,000 persons contributing toward invalidity insurance at the end of 1944, more than 90 percent had voluntarily insured themselves and their children under the health insurance system.

### **NETHERLANDS**

Origins.—Voluntary health insurance, in the form of relief funds for sick workers organized by the medieval guilds, began in the Netherlands as early as the fifteenth century. Although these funds

gave some assistance to their members when they were ill, the primary purpose of such organizations was at first religious. With the advent of the Reformation, however, most of the craft guilds abandoned religious activity and began to develop as mutual aid institutions for the relief of sickness. These institutions could be founded, originally, only with the permission of the communal authorities, who exercised strict supervision over their administration. The extension of the effects of the French Revolution to the Netherlands, toward the end of the eighteenth century, broke the virtually sovereign power of the individual municipalities, and the local guilds, strongly dominated as they were by the communal authorities, began to disintegrate.

Despite popular demand, beginning in the nineteenth century, for the reestablishment of mutual benefit associations, no action was taken in this direction by the Dutch Government until 1820, when a Royal decree gave communal authorities permission to encourage the formation of new mutual sickness insurance organizations. Soon after, under the Commercial Code of 1838, mutual insurance societies were "recognized." These attempts to stimulate the growth of mutual insurance were not very successful. The new mutual benefit societies were left largely to their own devices until 1855, when an act was passed requiring certain types of mutual societies to obtain Government approval of their regulations in order to receive legal status. In 1864, another act expressly exempted mutual insurance societies from the legal formalities imposed on other organizations desiring to obtain legal status. From that time on, the new mutual insurance movement made rapid headway.

The chief aim of these early mutual funds which furnished sickness benefits was daily cash payments to members who lost time from work because of illness. It was not until late in the nineteenth century that mutual societies began, to any great extent, to furnish medical benefits to their members.

Developments From 1900 to 1930.—During the first decade of the twentieth century, the need for further legal regulation of sickness insurance was recognized. The Dutch Parliament, in 1913 adopted an act providing compulsory insurance for cash sickness benefits for some sections of the population. This act was never put into effect, however, because the Government which succeeded to power in 1915 considered it so impracticable as to be unenforceable; sickness insurance in the Netherlands, therefore, continued to remain largely in the hands of the mutual insurance funds.

Shortly before the first World War, in 1913, the Dutch medical profession began setting up voluntary sickness funds administered by physicians. Management of these funds was usually vested in a board composed of doctors, pharmacists, and elected representatives of the insured members. A certain amount of uniformity was intro-

duced into the administration of medical benefits as a whole by the Medical Association when it began seriously to interest itself in sickness insurance. In many towns it was able to induce all local sickness insurance societies to sign a contract providing for uniform fees for doctors, uniform contributions and income limits for members, and a maximum in the number of families treated by any one physician.

By 1930, shortly after the passage of the Sickness Act of 1929 which finally established compulsory insurance for cash benefits, there were five major classes of sickness funds furnishing voluntary health insurance in the Netherlands: mutual, employer, commercial, "doctor" (i. e., funds run by the Medical Association), and miscellaneous. None of them, however, except the few run for profit and organized as limited companies, was legally bound to comply with any financial or accounting condition.

Characteristic of the early organization of voluntary health insurance in the Netherlands was the separation, carried over into the compulsory system, between mutual institutions granting daily cash benefits and those giving medical benefits. Before the compulsory system for cash benefits was established, funds granting such benefits ordinarily admitted to membership persons of either sex belonging, in general, to the class of industrial workers. Most funds offering cash benefits set a minimum age limit for membership, usually varying between 14 and 18, and a maximum limit, usually 45. Funds granting medical benefits usually insured the family of the contributor, whereas cash benefit funds covered only the insured person himself. A further difference between the two groups of funds was that persons could join several funds granting cash benefits, but only one for medical care insurance. The number of persons insured for the latter type of benefit was estimated at 1,250,000 in 1927, or about one-sixth of the total population.

Developments Under Compulsory Insurance: 1930 to the Present.—The Sickness Law of 1929, providing for cash benefits for wage losses due to sickness, went into effect on March 1, 1930. Covered by the statute (as amended in 1929, 1930, and 1934) were, in general, employed persons with a wage or salary of not more than G. 3,000 (now G. 3,750) <sup>17</sup> per year. Cash benefits for illness under the law, payable for a maximum of 26 weeks, amounted to 80 percent of the average daily wage earned by the insured person during the preceding 13 weeks, and a maximum daily wage was set, on the basis of which benefits were to be calculated. Voluntary insurance for cash benefits with the public carriers (i. e., funds set up by the 24

<sup>17</sup> In 1900, the Netherlands guilder had a value of about \$0.40; at present it is worth about \$0.38.

regional labor boards) <sup>18</sup> of compulsory insurance was permitted under the law to some self-employed persons and to employees who had either (1) ceased to fulfill the conditions for compulsory insurance; or (2) had been insured either voluntarily or compulsorily in foreign countries and had adopted the Netherlands as their permanent place of residence. Contributions and benefits for voluntarily insured persons under the 1929 law are fixed by the labor boards for each individual when he joins the system.

Although medical benefits remained on a voluntary basis when the compulsory cash benefit system became effective, most of those subject to the compulsory system were virtually forced to become members of a medical benefit fund by a provision in the 1929 law requiring proof of membership in such a fund, or of ability to obtain medical care elsewhere, before eligibility for cash benefits could be established. This provision further stimulated the growth of voluntary medical care insurance in the Netherlands. The Central Statistical Office reported that 439 voluntary medical benefit funds existed in the country on January 1, 1936; they had a membership of 3,338,000. including dependents entitled to benefits. The largest of them, run by the Netherlands Medical Association, had 81 branches and insured 32.8 percent of all persons covered by voluntary insurance for medical benefits. Insurance with these funds was usually open to anyone whose income did not exceed limits fixed by each fund individually. Most of them also fixed an age (usually 16) above which young members had to pay the full adult contribution. Contributions varied according to whether a specified fund operated in an urban or rural area.

Most of the sickness funds had started by providing only general practitioner's care, but other benefits such as drugs, specialist's care, dental care, midwife's assistance, and, in some cases, hospitalization and surgical appliances had been added in turn, so that by the time of the German invasion of the Netherlands in 1940, many of the funds giving medical care insurance were offering all these benefits.

When medical benefit insurance was finally made compulsory in 1941, with the passage of the Sickness Funds Decree, many of the existing voluntary sickness funds furnishing medical benefits were recognized by the Government as "general sickness funds" for the purpose of administering the new compulsory system. The number of funds providing voluntary medical benefits had grown by this time to more than 600, and about 4,000,000 persons (including dependents

<sup>18</sup> Approved industrial associations—nonprofit occupational funds established jointly by organizations of employers and employees—were also established by the Sickness Law. They administer by far the larger share of compulsory cash benefit insurance, but do not insure persons voluntarily for cash benefits, as do the labor boards.

of contributors) were eligible for these benefits. Only those funds, however, which offered benefits specified by law were accepted into the compulsory system.

The new law covered compulsorily for medical benefits all those, in general, subject to the cash benefit provisions of the Sickness Law of 1929. Contributions also provided coverage for certain classes of the insured persons' dependents. Medical benefits included general practitioner's care; surgical, obstetrical, and other specialist's treatment; hospitalization for 42 days; all necessary medical and surgical appliances; certain types of dental treatment; ambulance service; and part of the cost of care in a tuberculosis sanitarium. Voluntary insurance for medical benefits with the general sickness funds was permitted to the self-employed under the same conditions as for cash benefits. A lower limit of membership of 2,000–3,000 persons was prescribed for recognized general sickness funds, and it was required that compulsory and voluntary insurance accounts maintained by the same fund be administered separately.

Voluntary insurance for both cash and medical benefits remains extensive in the Netherlands, entirely outside the compulsory system. Such insurance is usually bought either by those classes of the population not covered by the compulsory insurance laws or by those under the compulsory program who desire supplementary benefits. Neither compulsory nor voluntary sickness insurance receives, or ever has received, a contribution from public funds in Holland. A total of about 2,550,000 people, or nearly one-third of the Dutch population, was insured voluntarily for sickness benefits in December 1945.

Plans are now being discussed for a further extension of compulsory health insurance to include the provision of medical benefits for lowincome self-employed persons.

#### REFERENCES

#### General Sources for Two or More Countries

### Individual Countries

England and Wales.—(11) Acts: Original texts of pertinent laws and amendments. (12) Beveridge, Sir William: Social insurance and allied services, New York, MacMillan Co., 1942. (13) British Medical Association: An investigation into the economic conditions of contract medical practice in the United

Kingdom, London, 1905. (14) —————: Memorandum on the establishment and development of public medical services together with a model scheme, London, 1937. (15) Central Provident Association, Ltd.: The central provident association, London. (16) Dawson, W. H.: Friendly societies, Encyclopedia of the Social Sciences, vol. 6, pp. 494-498, New York, MacMillan Co., 1931. (17) Economist, vol. 150, pp. 794-796; vol. 151, pp. 163-164, 744, London, 1946. (18) Farman, Carl, and Perrins, Catherine: The new British system of social security, Social Security Bulletin, vol. 10, pp. 9-19, Washington, February 1947. (19) Government Actuary: Fifth valuation of the assets and liabilities of approved societies, Cmd. 6455, London, His Majesty's Stationery Office, 1943. (20) Hospital Savings Association: The twenty-third annual report and statement of accounts for the year ended 31st July 1945, London, 1945. (21) King Edward's Hospital Fund for London: Statistical summary of the income, expenditure and work of one hundred and sixty-seven London hospitals for the year 1944, London, 1945. (22) Ministry of Health: Annual report, London, 1945 (and earlier issues). (23) National Insurance Gazette, vol. 35, p. 530, London, 1946. (24) Newman, T. S.: The story of friendly societies and social security, London, Hearts of Oak Benefit Society, 1945. (25) PEP (Political and Economic Planning): Medical care for citizens, Planning No. 222, London, 1944. (26) -: Report on the British health services, London, 1937. (27) Queen's Institute of District Nursing: Suggestions as to the provident method of support of district nursing, London, 1941. (28) Royal Commission on National Health Insurance: Report . . . , London, His Majesty's Stationery Office, 1928.

France.—(29) Acts: Original texts or translations of pertinent laws and amendments. (30) Bry, Georges: Les lois du travail industriel et de la prévoyance sociale, 6e éd., Paris, Librairie du Recueil Sirey, 1921. (31) Chailley-Bert, Joseph, et Fontaine, Arthur: Lois sociales, recueil des textes de la législation sociale de la France, Paris, Leon Chailley, éd., 1895. (32) Crochard, A.: L'assurance obligatoire contre la maladie et les sociétés de secours mutuels en France, Paris, V. Giard & E. Brière, 1902. (35) Hubert, René, et al.: Les assurances sociales, vol. 2, Paris, Librairie Dalloz, 1931. (34) Ministère du Travail et de la Prévoyance Sociale: Rapport sur les opérations des sociétés de secours mutuels pendant l'année 1908; . . . 1910, Melun, Imprimerie Administrative, 1911, 1913. (35) Secrétariat d'état: La sécurité sociale en France, Notes Documentaires et Études, No. 450, Série française 113 (1946). (36) Sirvin, Lucien: Guide théorique et pratique des assurances sociales . . ., Paris, Librairie du Recueil Sirey, 1935. (37) Statistique Générale de la France: Annuaire statistique, vols. 35, 39, 43, 48, and 51, Paris, Imprimerie Nationale, 1919-36. (38) U. S. Department of Labor, Bureau of Labor Statistics: Monthly Labor Review, vol. 3, pp. 90-96 (1916); vol. 39, pp. 629-638 (1934); vol. 46, pp. 622-637 (1938).

Belgium.—(39) Acts: Original texts or translations of pertinent laws and amendments. (40) Bégasse, Joseph: Les assurances sociales en Belgique, Paris, Berger-Levrault & Cie., 1907. (41) Ministère des Affaires Économiques, Office Central de Statistique: Annuaire statistique de la Belgique et du Congo Belge, 1944, Tongres, 'George Michiels, 1944 (and earlier issues). (42) Ministère du Travail et de la Prévoyance Sociale: Bulletin d'Information du Fonds National d'Assurance Maladie-Invalidité, Special numbers, March 25 and May 20, 1946, Brussels, 1946.

Sweden.—(43) Acts: Original texts or translations of pertinent laws and amendments. (44) Kungl. Socialstyrelsen: De erkände sjukkassornas verksamhet år 1944, Sociala Meddelanden, vol. 56, pp. 863-865 (1946). (45) Royal Social Board: Social work and legislation in Sweden, Stockholm, Tryckeriaktiebolaget Tiden, 1938 (and earlier editions). (46) Socialdepartementet: Den familjevårdande socialpolitiken; en redogörelse utarbetad av 1941 års befolkningsutredning, Stockholm, K. L. Beckmans Boktryckeri, 1946. (47) ——: Socialvårdens omfattning och kostnader efter 1930; en statisk översikt utarbetad av 1941 års befolkningsutredning, Stockholm, K. L. Beckmans Boktryckeri, 1944. (48) ——: Socialvårdskommitténs betänkande VII; Utredning och förslag angående lag om allmän sjukförsäkring, Stockholm, K. L. Beckmans Boktryckeri, 1944. (49) Statistiska Centralbyrån: Statistisk årsbok för Sverige; trettiotredje årgånge, 1946, Stockholm, P. A. Norstedt & Sons, 1946 (and earlier issues).

Denmark.—(50) Acts: Original texts or translations of pertinent laws and amendments. (51) Christensen, Viggo: Social insurance and public assistance in Denmark, Copenhagen, Engelsen & Schrøder, 1937. (52) Commissioner of Recognized Sickness Funds: The national sickness, invalidity, and funeral insurance in Denmark, Copenhagen, 1932. (53) Danish Foreign Office Journal: Social insurance and public assistance in Denmark, Reprint, No. 221, June 1939. (54) Direktøratet for Sygekassevaesenet: Beretning fra direktøren or sygekassevaesenet i aaret 1944, Copenhagen, Krohn, 1946 (and earlier issues). (55) International Labour Office: International Labour Review, vol. 30, pp. 213-226 (1934). (56) Socialt Tidsskrift: Social Denmark; A survey of the Danish social legislation, Copenhagen, Krohn, 1945. (57) Statistiske Department: Danmarks statistik aarbog, Copenhagen, Bianco Lunos Bogtrykkeri, 1946 (and earlier issues). (58) U. S. Department of Labor: Monthly Labor Review, vol. 46, pp. 364-370 (1938). (59) Wechselmann, Sigurd: The Danish national insurance act, Copenhagen, J. N. Schultz, Ltd., 1936. (60) Westergaard, Harald: Economic developments in Denmark before and during the world war, Carnegie Endowment for International Peace, Division of International Law, Pamphlet No. 36, Oxford, Clarendon Press, 1922.

# INCIDENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

# UNITED STATES

# REPORTS FROM STATES FOR WEEK ENDED MAY 3, 1947 Summary

A total of 3,586 cases of influenza was reported for the week, as compared with 8,037 last week and a 5-year (1942–46) median of 1,426. While the current total is less than half that of last week, it is more than twice the number reported for any corresponding week of the past 5 years. Only 5 States reported more than 85 cases, and only 3 more than 152—Virginia (893, last week 2,885), South Carolina (652, last week 914), and Texas (938, last week 1,459). Of the 290,376 cases reported for the year to date, 249,785, or 86 percent, occurred in the 9 weeks since March 1.

Of 9 cases of smallpox reported for the week, 3 occurred in Wisconsin, 2 in New York City (the first reported since April 9, bringing the total for the State to 14, with 2 deaths), 2 in Kentucky, and 1 each in Indiana and New Mexico. The total for the year to date for the entire country is 111, as compared with 191 for the same period last year and a 5-year median of 213.

Of 25 cases of poliomyelitis reported for the week (last week 28, 5-year median 23), 6 occurred in New York and 5 in California. No other State reported more than 2 cases. The lowest weekly total so far this year (22 cases) was reported for the week ended April 5, 3 weeks later than the approximate average date of seasonal low. The total reported since the average low date (week ended between March 15 and 21) is 194, as compared with 207 for the same period last year and a 5-year median of 153.

A total of 9,750 cases of dysentery (amebic, bacillary, and unspecified, currently slightly below the combined median figures) has been reported for the year to date, as compared with 7,798 for the corresponding period last year and an average of 7,169 for the 4 years 1943–46.

Deaths recorded for the week in 93 large cities of the United States totaled 8,977, as compared with 9,434 last week, 8,974 and 8,920, respectively, for the corresponding weeks of 1946 and 1945, and a 3-year (1944-46) median of 8,922. The cumulative total is 179,924, as compared with 178,222 for the same period last year.

Telegraphic morbidity reports from State health officers for the week ended May 3, 1947, and comparison with corresponding week of 1946 and 5-year median

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

cases may have occ	urrea.											
	D	iphthe	ria		Influen	za		Measle	es .		feningi ningoc	
Division and State		eek ed—	Me- dian	W end	eek led—	Me- dian	end	eek led—	Me- dian	w	eek ed—	Me- dian
	May 3, 1947	May 4, 1946	1942- 46	May 3, 1947	May 4, 1946	1942- 46	May 3, 1947	May 4, 1946	1942- 46	May 3, 1947	May 4, 1946	1942- 46
NEW ENGLAND				1								
Maine	. 1	5	0	4		.	_ 134					2 0
New Hampshire Vermont	. 0						192	60		0		0
Massachusetts			4				461			ľ	ľ	0 7 1
Rhode Island	. 1	4	1				_ 182	28	28	Õ	1	i
Connecticut	. 1	2	2	9			- 842	476	476	1	2	2
MIDDLE ATLANTIC		١		١.,	١							
New York New Jersey	20 15	15 6	15 5	1 6 4	17		7 531 4 420	4, 757 4, 743	1, 624 1, 252	8 2	11 3	19 4
Pennsylvania	17	13	8	(2) <sup>3</sup>	2 1	2	305	4, 320	1, 678	3	7	13
EAST NORTH CENTRAL			-	``	_			"	-,	Ĭ	·	
Ohio	9	12	8	8	3		7 920	734	591	2	6	8
Indiana	5	14	3	12	4		111	610	261	3 4	1	2
Illinois	3	4 5	5 5	12	2	1 1	185 1 128	1,022 1,913	719 1,067	1	8 4	15 4
Wisconsin	ı	2	ŏ	24	27	38		3, 980	1,854	i	i	i
WEST NORTH CENTRAL						l		1				
Minnesota	9	11	3	2			460	52	390	o	3 1	3
Iowa Missouri	1	7	2 2	3	<u>i</u>		127 26	281	259	1	1	1
North Dakota	1 1	1	1	č	1	27		179	183 6	5 1	4	4 0
South Dakota	1	1	0				71	55	39	Ö	ol	ŏ
Nebraska	0	1	3	8	2	3	. 11	303	220	1	0	0
Kansas	4	10	5	2			13	514	557	2	0	2
SOUTH ATLANTIC	۱ ا	o	ام	1			2				ا	
Delaware		ğ	0	2	4	6		66 716	30 500	0	0	1 8
District of Columbia.	0	Ō	0				25		121	ŏ	ol	2
Virginia.	3	10	4	893	106	143		384 608	452	2	1	7
West Virginia North Carolina	1 9	7	5	24	3	13 1	31 115	45 491	52 491	7	0	2 7 2 3 3
South Carolina	4	2	2	652	150	207		271	141	3	i	3
Georgia	0	3	2	41	1	2	107	94	128	1	1	1
Florida	4	3	3	78		3	60	209	209	1	1	3
EAST SOUTH CENTRAL	6	2	2	6	3	7	9	762	150	اا	4	•
Kentucky Tennessee	6 5	3	4	83	13	18	104	237	153 196	4	3	3 4
A la bama	0	0	5	127	21	21	285	212	198	2 2	ŏ	ŝ
Mississippi 3	3	1	5	45			23			0	0	4.
WEST SOUTH CENTRAL				150	-					_[		_
Arkansas Louisiana	2	1 4	2	152	21	21	72 45	208 84	122 124	2	2 0	2
Ukianoma	0	2	4	85	21	34	6	323	176	î	8	2 2
Texas	17	23	23	938	439	439	414	1,898	1, 293	4	8	9
MOUNTAIN	_	_			l			- 1		- 1	-	
MontanaIdaho	0	0	1	42 21	19	5 2	140	54 140	81	0	o o	0
w yoming.	ĭl.	- il	ō	1	19	4	15	91	58 91	0	0	0
Colorado	9	4	4	74	1	18	141	446	299	ŏ	ŏ	ĭ
New Mexico Arizona	1	4	1	12 85	1 32	1 42	62 61	117 266	35	0	O)	Õ
Utah 3	ĭ	ō	ó	28	32	5	10	388	127 267	0	0	0 1
Nevada	Ō	Ö	Ŏ.		]-			7	16	ŏ	ŏ	Ô
PACIFIC						i		- 1				
Washington	0	8	7	11 -			47	463	377	3	5	3
Oregon California	2 13	0 26	20	36 33	15	14 29	33 240	338 3, 976	191 3, 612	0	0 8	3 15
Total	188	245	- <sub>192</sub> -	3, 586	909	1, 426		1-	3, 012 26, 032	<del></del>		158
18 weeks		6, 425		90, 376			107, 221 4					1, 167
J-		•		00, 010 1	os, 140:	12, 304	101, 261,4	19, 190 3	±0,000	1,050	0, 1/1  '	2, 10 <i>1</i>
Seasonal low week 4.	(27th)	July 5	-11 (	30th) Ju	1ly 26-A	lug. 1	(35th) A	ug. <b>3</b> 0–8	Sept. 5	(37th) 8	Sept. 13	3-19
Total since low	2, 387 18	8, 069 1:	3, 811 3	23, 351 5	14, 988 1	08, 226	130, 108	45, 254 3	78, 879	2, 568	4, 675	3. 619
137. 37. 1 000					/		,	,10	,	-, 0001	-, 0.01	,

New York City only.
 Philadelphia only.
 Period ended earlier than Saturday.
 Dates between which the approximate low week ends. The specific date will vary from year to year.

Telegraphic morbidity reports from State health officers for the week ended May 3, 1947, and comparison with corresponding week of 1946 and 5-year median—Con.

	Po	liomye	litis	Se	carlet fe	ver	s	mallpo	x	Typh	oid and	i para- ver s
Division and State	. We	eek ed—	Me-	W	eek ed—	Me-	Wend	eek ed—	Me-		eek	Me-
	May 3, 1947	May 4, 1946	dian 1942- 46									
NEW ENGLAND												
Maine	0	0	0			18	0	0	0	1	1	0
New Hampshire Vermont	0	0 1	0	8 6		11 9	0	0	0	0		0
Massachusetts	0	0	0	92	191	309	θ	0	0	4 0	2	0
Rhode Island Connecticut	0 2	0	0	9 30	62	16 62	0	0	0	ő	Ô	0 1
MIDDLE ATLANTIC										_		_
New York New Jersey	6	1 0	1	355 120	511 165	553 153	2 0	0	0	5 0	1 2	2 0
Pennsylvania	ŏ	ŏ	0	204	436	436	ŏ	ŏ	ŏ	5	6	ő
EAST NORTH CENTRAL												
OhioIndiana	1 0	0	1	231	305 73	320 78	0 1	1	0 3	12 2	4	4
Illinois	ŏ	ŏ	0	77 99	198	198	ō	0	. 0	17	1	2 1
Illinois	1 0	0	0	114 66	176 101	176 193	0	0	0	3 1	1 0	1
WEST NORTH CENTRAL	ď	U	0	66	101	193	3	1	1	1	۳	U
Minnesota	o	0	0	44	44	72	0	0	0	1	0	0
Iowa	1 0	1 2	0	23	61 22	57	0	4 0	1	0 3	0	0
Missouri	2	0	0	17 4	9	55 17	0	Ö	0	0	0	Ó
South Dakota	o o	0	0	4	7	19	0	Ó	Ó	0	Q	0
Nebraska Kansas	0	. 0	0	22 40	27 71	27 71	0	0	0	1 1	0	0
SOUTH ATLANTIC	Ĭ	Ĭ	1	10		•	Ĭ	1	٦			
Delaware Maryland 3	0	0	0	4	4	5	0	0	0	0	1	0
District of Columbia	0	0	0	41 11	78 13	136 22	0	8	0	0	3 0	2 0
Virginia	Ó	1	0	20	61	61	Ŏ	Ō	0	Ó	0	1
West Virginia North Carolina	0	0	0	14 20	22 44	25 37	0	0	0	1 0	0 1	1 2
South Carolina	0	0	ŏ	3	6	4	Ó	Ó	0	ĭ	0	1
GeorgiaFlorida	0 2	1 4	1 3	6 3	9 6	9	0	0	0	0	5 0	2 2
EAST SOUTH CENTRAL	- 1	1	ိ	ំ	ď	ๆ	۷	٦	٦	Ĭ	٦	-
Kentucky	o	0	o	24	25	45	2	0	o	3	0	1
TennesseeAlabama	0	0	0	23 9	29	41 11	0	0	0	0	1	1 2
Mississippi <sup>3</sup>	ŏ	ŏ	ŏ	7	2	5	ŏ	ŏ	ŏ	2	3	ĩ
WEST SOUTH CENTRAL	1		İ		1					_[		_
Arkansas Louisiana	0	0	0	2 5	20	7	0	0	0	1 2	2	2 2 0
Oklahoma	0	ō	ő	4	8	12	0	0	0	2 0	1	Õ
Texas	2	2	3	15	34	48	0	0	0	6	6	6
MOUNTAIN Montana	0	o	0	3	10	17	0	1	o	o	0	0
Idaho	1	Ö	ō	3	8	31	0	0	Ó	0	1	0
Wyoming	0	0 2	0	7	12	16	0	0	0	0	0	0
New Mexico	1	1	0	45 9	19 9	48 9	1	0	0	0	1	1
Arizona Utah <sup>8</sup>	0	1	0	7	14 22	13 22	0	0	0	0	0	0
Nevada	ő	0	0	18 1	22	0	0	0	0	ŏ	ŏ	ŏ
PACIFIC	1	1	•	-	7	. 1	1					
Washington	0	1	0	22	20	37	0	7	0	2	0 5	0
Oregon California	0 5	0	0	16 130	43 197	23 197	0	Ö	ŏ	6	3	3
Total	25	23	23	2,047	3, 225	3, 859	9	17	17	82	52	54
18 weeks	820	673	455	47, 007	63, 145	71, 761	111	191	213	820		1, 049
Seasonal low week 4		Mar.			) Aug.		(35th	Aug.	30-	(11th)	Mar.	
Total since low	194	207	153	73, 693	101, 716	10,082	165	267	330	335	422	444
				<u> </u>								

Period ended earlier than Saturday.
 Dates between which the approximate low week ends. The specific date will vary from year to year.
 Including paratyphoid fever reported separately, as follows: Maine 1; Massachusetts 4 (salmonella infection); New York 3; Nebraska 1; Texas 2; California 4.

Telegraphic morbidity reports from State health officers for the week ended May 3, 1947, and comparison with corresponding week of 1946 and 5-year median—Con.

	Wh	ooping		Week ended May 3, 1947										
Diminion and State	Week	ended-	Me-	]	Dysen	tery	En	Rock	7	Ту-	Un			
Division and State	May 3, 1947	May 4, 1946	dian 1942- 46	Ame	Baci		i- infec	s, spot-	Tula		lan			
NEW ENGLAND	1	ł		1	1	1								
Maine New Hampshire	31				-	-	-	-		-	-			
Vermont.	7	43	24	4			-							
Massachusetts Rhode Island	104 24				-	1	-	-		-	-			
Connecticut	44		14			i	-		-					
MIDDLE ATLANTIC						İ					1			
New York	174	135			1	1	-	1	_	.				
New Jersey Pennsylvania	145 158	132 102	132 208		.	-	1	-	-	.				
EAST NORTH CENTRAL	100	102	200	·		-	-	-			l			
Ohio	176	98	154		İ		1	1	1	1				
ndiana	42					.	-	i	-		L			
llinois	102	99	28 99			-	-  :	3	.		:			
Vichigan 3	260 153	132 85	132 85			-	-	-	-		١,			
WEST NORTH CENTRAL		"	"						-1		ĺ .			
finnesota	32	9	12				İ	I		i				
)W8	24 22	20	18								:			
Issouri Iorth Dakota	22 2	8 1	8 11						-	- <b>-</b>				
outh Dakota		1							-					
ebraska	37	2	5	1		.								
ansas	25	25	36			·			·					
SOUTH ATLANTIC	_					1	1	ļ	1					
elaware [aryland 3	5 80	4 24	1 52					·	·					
istrict of Columbia	9	12	12											
irgirtia	85	36 32	55		ļ	83			1					
est Virginiaorth Carolina	47 66	95	31 115											
outh Carolina	109	31	67	6						1				
eorgialorida	27 77	18 16	14 42	<u>1</u>	1				2	4				
EAST SOUTH CENTRAL	``'	- "			•									
entucky	53	22	39				l	l	1 1					
ennessee	36	33	33				ī		1					
abama ississippi 3	64	25	37	3	2				2	5				
WEST SOUTH CENTRAL	.0			3					2					
rkansas	45	6	اء.	9		,	İ	1	ا	- 1				
uisiana	9	39	14 5	10		1			3 4	2				
KIBDOM8	20	14	17						ī					
MOUNTAIN	763	196	270	11	214	17		- <b></b>		13	1			
	ا۔	ا،	ا۔								-			
ontana	5 9	14	5 9					2						
yoming	21	2 35	3					ĩ						
olorado	. 42 28	35 9	34							-				
120118	34	9	26			15								
ah ³	5	36	44								:			
			ગ.							-				
PACIFIC	اي	40	اء						1					
ashingtonegon	26 22	48 18	46 19	1						-				
lifornia	351	135	283	5	i		i				8			
Total	3, 609	2, 073	2, 646	46	230	117	7	3	15	26	117			
me week, 1946=	2,073			26	322	129	·11		14	45	112			
me week, 1946edian, 1942-46	2,646			24	285	90	11	8 8 21	9	45	6 92			
weeks: 1947	18, 000 33, 035	-		828 669	5, 303 5, 261	3, 619 1, 868	121	21 29	570 329		1,868			
edian, 1942-46	14, 726	-			3, 959	1, 220	153 153	29	294	827 817	1, 100 1 EO1			

<sup>3</sup> Period ended earlier than Saturday.

<sup>&</sup>lt;sup>6</sup> 2-year average, 1945-46.

Anthrax: Pennsylvania 1 case.

# WEEKLY REPORTS FROM CITIES 1

City reports for week ended Apr. 26, 1947

This table lists the reports from 90 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	8	4	Influ	lenza		ag,	i a	is	9 1		99	a
	cases	is, i		i enza	88	1 %	la	e it	<i>1</i> >	88	e de	nos _
Division, State, and City	Diphtheria	Encephalitis, in- fectious, cases	Cases	Deaths	Measles cases	Meningitis, meningococcus, cases	Pneumo deaths	Poliom yelitis cases	Scarlet fe	Smallpox cases	Typhoid and paratyphoid lever cases	Whooping cough cases
NEW ENGLAND												
Maine: Portland	0	0		0	52	0	4	0	2	0	0	13
New Hampshire: Concord	0	0		0	02	0	2	0	0	0	o	10
Vermont:	0	0		0	3	0	2	0	0	0	0	1
Massachusetts: Boston	4	0		0	65	3	12	o	21	0	1	12
Fall River Springfield Worcester	Ō	0		Ŏ	23	1 0	1	0	2 6	0	0	1 2 6
Worcester Rhode Island	ŏ	Ŏ		Ŏ	9	0	4	Ō	4	Ŏ	1	
Providence Connecticut:	0	0	1	1	226	0	2	0	6	0	0	10
Bridgeport Hartford New Haven	0 1 0	0 0 0		0 0 0	14 95 97	0 0 0	4 2 0	0 0 0	2 2 3	0 0 0	0 0 0	<u>-</u> 8
MIDDLE ATLANTIC												
New York: Buffalo New York Rochester	1 14 0	0 1 0	5 	3 0 0	1 321 4	2 5 2	12 66 2	0 1 0	3 122 15	0 0 0	0 1 0	1 64 1
Syracuse New Jersey:	0	0		0	1	0	2 2	0	8 2	0	0	15
Camden Newark Trenton	8 0 0	0 0 0	2	0 0 0	27 4	0	3 2	0	14 3	0	0	22 7
Pennsylvania: Philadelphia Pittsburgh Reading	2 4 0	0	5 1	4 1 0	17 11 3	0 0 0	28 12 1	0 0 0	48 11 3	0	0 0 0	44 10
EAST NORTH CENTRAL			~									
Ohio: Cincinnati Cleveland Columbus	0 1 0	0 0 0	1 4 3	1 0 3	2 185 83	1 1 0	3 11 0	0 0 0	7 30 9	0 0 0	0 0 1	5 46 20
Indiana: Fort Wayne	0	0	<u>i</u> -	0	25 1	0	2 4	0	2 10	0	0	2 51
Indianapolis South Bend Terre Haute	0	ŏ		ŏ	34	ŏ	Õ	ŏ	6	ŏ	ŏ	
Illinois: Chicago	0	1	3	0	28	5	24	0	34	. 0	0	32
Springfield	ŏ	0		Ŏ	19	0	3	Ō	0	0	0	
Detroit	1 0 0	0 0 0	1	1 0 1	3	0 0 1	9 6 0	0.0	40 3 3	0 0 0	0	97 9
Wisconsin: Kenosha Milwaukee Racine Superior	0 0 0	0 0 0		0	15	0 0	0 6 0	0	1. 4 12 0	0 0 0	0	10 33 11
WEST NORTH CENTRAL	-	-				-	-					
Minnesota: Duluth Minneapolis St. Paul	0	0		0	10 230	0 2 0	2 6 3	0	1 2 9	0	0	7 2 5
Missouri: Kansas City St. Joseph St. Louis	0 0 2	0		1 0 0	2	0 0 1	6 0 5	1 0 0	7 0 8	0	0 0 2	<u>2</u> 6

<sup>&</sup>lt;sup>1</sup> In some instances the figures include nonresident cases.

# City reports for week ended Apr. 26, 1947—Continued

						,						
	cases	s, in-	Infi	uenza	- 83	me-	nis	litis	ever	ses	and hoid	qgno
Division, State, and City	Diphtheria cases	Encephalitis, in- fectious, cases	Cases	Deaths	Measles cases	Meningitis, meningococcus,	Pneumon deaths	Poliom yelitis cases	Scarlet fev cases	Smallpox cases	Typhoid and paratyphoid	Whooping cough
WEST NORTH CENTRAL— continued												
North Dakota: Fargo	0	0		0	4	0	3	0	2	0	0	
Nebraska: Omaha	1	0		0	3	0	2	1	1	0	0	2
Kansas: Topeka Wichita	0	0		0	<u>i</u>	0	1 5	0	1	0	0	2 3
SOUTH ATLANTIC					_					Ů		
Delaware:												
Wilmington Maryland:	0	0		0		0	3	0	2	0	0	4
Baltimore Cumberland	7 0	0	3	1 0	7	1 0	8 2	0	14 3	0	0	62
Frederick District of Columbia:	ŏ	ŏ		ŏ		ŏ	õ	ŏ	ŏ	ŏ	ŏ	
Washington	0	0		0	32	3	12	0	9	0	0	11
Virginia: Lynchburg	o	0	1	0		0	1	0	2	0	0	1
Richmond	0	0	1	1	65	1	2	0	1	0	0	
Roanoke West Virginia:	0	0		0	22	0	0	0	1	0	0	
Charleston	0	0		0		0	0	0	0	0	. 0	<sub>1</sub>
Wheeling	1	- T		0		- 1	4	0	0	0	0	
RaleighWilmington	0	0		0	7 8	0	3	0	0	0	0	16
Wilmington Winston-Salem	ĭ	ŏ .		ŏ	21	ŏ	š	ŏ	3	ŏ	ŏ	2
South Carolina: Charleston	0	0	10	0	23	0	1	o l	1	o	0	
Georgia: Atlanta	0	0	2	2	17	0	3	0	2	0	0	3
Brunswick	0	0		0		O	1	Ŏ l	ō	Ō	0	
Savannah Florida:	0	0	2	2	7	0	2	0	1	0	0	
Tampa	0	0 -		0	4	0	3	0	0	0	0	
EAST SOUTH CENTRAL				- 1			- 1					
Cennessee:	0	0	4	2	ام	0	اء				0	
Memphis Nashville	ŏ	ŏ .		ő	6	ĭ	8 3	0	2 2	0	ŏ.	7
labama: Birmingham	0	0	9	0	32	1	3	9	0	o	0	
Mobile	ŏ	ŏ	2	ő	9	õ	2	ŏ	ŏ	ŏ	ŏ į	
WEST SOUTH CENTRAL	İ			İ	1				ı	- 1		
Arkansas: Little Rock	0	0	1	0	2	0	9	0	0	0	0	9
ouisiana:		1	- 1		- 1	1			- 1	- 1	- 1	
New Orleans Shreveport	2 0-	0	8	0 -	70	1 0	8 7	0	3 0	0	3 -	5
klahoma: Oklahoma City	0	0	4	1		- 1		1			1	•••••
exas:	1	- 1	*	0  -		0	1	0	1	0	0	1
Dallas Galveston	1 0	0		0 -	118	0	4	0	5	0	1 0	7
Houston	4	0	8	0	5	ō	9	0	5	0	i	i
San Antonio	0	2	1	0	4	0	8	0	0	0	0	1
Iontana:		ł					- 1			-		
Billings	0	0		0		0	2	G	0	o l	0 -	
Great Falls Helena	2	0		0	15 2	0	8	0	8	0	0 -	<u>2</u>
Missoulaolorado:	ŏ	ŏ	57	ŏ	20	ŏ	ĭ	ŏ	ŏ	ŏ	ŏ	<b>-</b>
Denver	3	0	2	0	26	0	6	0	20	0	0	4
Pueblotah:	1	0		0		0	Ŏ	Ŏ	i	Ō	0	
Salt Lake City	0	0		o l	4	0	1	0	3	0	1	

# City reports for week ended Apr. 26, 1947—Continued

	cases	ses	Influ	ienza	80	me- cus,	nís	litis	ever	88	and hoid s	cough
Division, State, and City	Diphtheria	Encephalitis, ir fectious, cases	Cases	Deaths	Measles cases	Meningitis, ningococo	Pneumo desths	Poliomyel cases	Scarlet fe cases	Smallpox cases	Typhoid paratyph fever cases	Whooping cases
PACIFIC												
Washington:		١.				· .		١.	_			_
Seattle Spokane	1 0	0		0	8 15	0	8 1	0	7	0	0	5 4
Tacoma	ŏ	ŏ		ŏ		ŏ	Ó	ŏ	2	·ŏ	ŏ	4 3
California:		_				١.			22		١,١	FA
Los Angeles Sacramento	5 0	0	4	0	12	1 0	4	5 0	1	0	1 0	50 4
San Francisco	ĭ	ŏ	1	ŏ	7	ŏ	4	ž	2	ŏ	ž	4 3
Total	68	4	149	25	2, 192	33	401	11	588	0	15	769
Corresponding week, 1946*	86		59	20	12, 004		340		1,083	2	15	492
Average 1942-46*	65		63	2 19	<sup>3</sup> 6, 574		2 351		1, 583	ī	13	768

<sup>&</sup>lt;sup>2</sup> 3-year average, 1944-46.

Rates (annual basis) per 100,000 population, by geographic groups, for the 90 cities in the preceding table (latest available estimated population, 34,605,800)

	case	8		ıenza	rates	me- case	death	case	case	case rates	para- ever	ugno
	heria	Encephalitis, fectious, rates	rates	rates	ss case	feningitis, ningococcus, rates		Poliomyelitis rates	fever	ox case	Typhoid and typhoid for case rates	Whooping cough case rates
	Diphth	Encepl fect rates	Case r	Death	Measles	Meningitis, ningococc rates	Pneumonia rates	Polion	Scarlet	Smallpox	Typhc typ case	Whool
New England	13. 1	0.0	2.6	2.6	1, 527	10. 5	86.3	0.0	125	0.0	5. 2	141
Middle Atlantic	13. 4	0.5	6.0	3. 7	181	4.2	60.2	0.5	106	0.0	0.5	76
East North Central West North Central	1.8	0.6	7.9 4.0	3. 6 2. 0	241 497	4.9 6.0	41.3 65.7	0.0 4.0	99 62	0. 0 0. 0	0.6 4.0	192 58
South Atlantic	6. 0 13. 1	0.0	29.4	9.8	348	8.2	76.8	0.0	65	0.0	0.0	163
East South Central	0.0	0.0	88. 5	11.8	283	11.8	94. 4	0.0	24	0.0	0.0	41
West South Central	17.8	5. 1	55. 9	0.0	505	2. 5	119.4	2.5	36	0.0	12.7	61
Mountain	49.6		487.3	0.0	553	0.0	82.6	0.0	198	0.0	8.3	50
Pacific	11.1	0.0	9.5	1.6	71	1.6	26.9	11.1	55	0.0	4.7	109
Total	10. 3	0.6	22. 5	3.8	331	5. 0	60. 6	1.7	89	0.0	2. 3	116

# PLAGUE INFECTION IN YAKIMA COUNTY, WASH.

Under date of April 29, plague infection was reported proved, on April 28, in a pool of 18 fleas from 19 pocket mice, Perognathus sp., and 89 fleas from white-footed mice, Peromyscus sp., collected April 11 at a location 6 miles east of Antiaircraft Range Headquarters, Yakima County, Wash.

<sup>&</sup>lt;sup>3</sup> 5-year median, 1942-46.
\*Exclusive of Oklahoma City.

Anthrax.—Cases: Philadelphia 1.

Dysentery, amebic.—Cases: New York 1; Detroit 2; St. Louis 1; New Orleans 1; Los Angeles 3.

Dysentery, bacillary.—Cases: New York 4; Cleveland 1; St. Louis 1; Memphis 1; Los Angeles 1.

Dysentery, unspecified.—Cases: Fargo 1 (newborn); San Antonio 6.
Leprosy.—Cases: Topeka 1.
Tularemia.—Cases: New Orleans 2.

Typhus fever, endemic.—Cases: New York 1; Savannah 1; Tampa 2; Mobile 1; New Orleans 1.

# FOREIGN REPORTS

### CANADA

Provinces—Communicable diseases—Week ended April 12, 1947.— During the week ended April 12, 1947, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Bruns- wick	Que-	Onta-	Mani- toba	Sas- katch- ewan	Al- berta	British Colum- bia	Total
ChickenpoxDiphtheria	2 2	17		158 13	186 3	15	21	64	94	557 21
German measles				32	45 20	5	7	3	2 13	94 62
Influenza	8 2	15 25		57	96	267	47	80	487	1,061
cus		<del>-</del> -	1	2		1		<u></u> -		4
Mumps Scarlet fever		6 5	9	32 56	477 84	46 3	99	15 5	185 11	860 173
Tuberculosis (all forms) Typhoid and paratyphoid		2	5	104	32	26	9	18	74	270
fever			3	11	2					16 3
Undulant fever Venereal diseases:				2	1					3
Gonorrhea Syphilis Other forms	2 1	6 9	18 6	165 55	(1)	41 14	20 8	39 8	75 32 2	366 133 2
Whooping cough		1	1	34	53	11			39	139

<sup>&</sup>lt;sup>1</sup> Figures for Ontario for the above period not received.

# REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—Except in cases of unusual incidence, only those places are included which had not previously reported any of the above-mentioned diseases, except yellow fever, during recent months. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the Public Health Reports for the last Friday in each month.

# Cholera

India—Calcutta.—For the week ended April 12, 1947, 433 cases of cholera with 125 deaths were reported in Calcutta, India.

Siam (Thailand)—Bangkok.—For the week ended April 19, 1947, 61 cases of cholera were reported in Bangkok, Siam (Thailand).

#### Plague

Egypt—Alexandria.—On April 29, 1947, 1 case of plague was reported in Alexandria, Egypt. The last previously reported case of plague in Alexandria occurred on September 9, 1946.

Peru—Piura Department—Huancabamba Province.—During the month of March 1947, 10 cases of plague were reported in Huancabamba Province, Piura Department, Peru.

Turkey—Urfa Province—Akcakale.—For the week ended April 19, 1947, 2 cases of plague were reported in Akcakale, Urfa Province, Turkey.

# Smallpox

Belgian Congo.—For the week ended April 5, 1947, 47 cases of smallpox with 1 death were reported in Belgian Congo.

Ethiopia.—Smallpox has been reported in Ethiopia as follows: Weeks ended—March 1, 1947, 12 cases; March 8, 1947, 2 cases; March 22, 1947, 3 cases.

India—Calcutta.—For the week ended April 12, 1947, 157 cases of smallpox with 124 deaths were reported in Calcutta, India.

Niger Territory.—For the period March 21-31, 1947, 240 cases of smallpox with 52 deaths were reported in Niger Territory.

# Typhus Fever

Eritrea.—For the week ended April 5, 1947, 42 cases of typhus fever with 1 death were reported in Eritrea.

Ethiopia.—Typhus fever has been reported in Ethiopia as follows: Weeks ended—March 1, 1947, 4 cases; March 8, 1947, 7 cases; March 22, 1947, 20 cases.

Guatemala.—During the month of February 1947, 63 cases of typhus fever (including 4 cases reported in Guatemala city) with 10 deaths were reported in Guatemala.

Libya—Tripolitania.—For the month of February 1947, 18 cases of typhus fever were reported in Tripolitania, Libya.

Peru.—For the month of February 1947, 74 cases of typhus fever were reported in Peru.

Poland.—For the week ended March 8, 1947, 19 cases of typhus fever were reported in Poland.

Rumania.—Typhus fever has been reported in Rumania as follows: February 1–28, 1947, 1,427 cases; March 1–31, 1947, 3,378 cases. In Bucharest, Rumania, 253 cases of typhus fever were reported for the week ended March 29, 1947, and 286 cases of typhus fever with 19 deaths were reported for the week ended April 5, 1947.

#### \* \* \*

# SMALLPOX IN NEW YORK CITY

During the week ended May 3, 2 cases of smallpox were reported in New York City, the first reported cases since April 9. The total since March 1 is 10 cases with 2 deaths in the city and 4 cases in an adjacent area, the first case of which was a New York City contact. Seven other cases were reported in the United States during the week, as follows: Wisconsin 3, Kentucky 2, New Mexico and Indiana 1 each.